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ABSTRACT

Since the late 1970s, Lakeshore Technical Institute (LTI), in keeping with Wisconsin's statewide priorities, has placed a major emphasis on economic development and training activities. While some administrators have been involved in promoting educational offerings and technical assistance to business and industry, many staff members have not accepted economic development as a major institutional goal. A study was conducted to assess the knowledge and attitudes of LTI staff concerning economic development. The study involved the administration of a survey instrument to all 220 full-time staff members, limited in-service training for administrators, and the administration of the survey instrument again at the end of the 1985-86 school year to measure changes in knowledge and attitudes. The study revealed that: (1) there were differences in knowledge and attitudes among various staff groups; (2) many staff members expressed negative attitudes toward the economic development activities of LTI; (3) of the participants in the in-service training, administrators and certified management staff experienced gains in their knowledge of economic development activities, while noncertified management staff did not; and (4) instructional and support staff, who had no formal in-service training, had constant scores on attitude and knowledge measures. The report includes a literature review, a 67-item bibliography, and the survey instruments. (AJL)

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ANALYSIS OF KNOWLEDGE AND ATTITUDE IMPACTING IMPLEMENTATION OF ECONOMIC DEVELOPMENT AND TRAINING ACTIVITIES AT LAKESHORE TECHNICAL INSTITUTE

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A Major Applied Research Project presented in partial fulfillment of the requirements for the degree of Doctor of Education

Nova University

November 1986

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ABSTRACT OF A MAJOR APPLIED RESEARCH PROJECT PRESENTED
TO NOVA UNIVERSITY IN PARTIAL FULFILLMENT OF THE
REQUIREMENTS FOR THE DEGREE
OF DOCTOR OF EDUCATION

Analysis of Knowledge and Attitude Impacting Implementation of Economic Development and Training Activities at Lakeshore Technical Institute

by

Judy M. Powers
November 1986

During the late 1970s and early 1980s, economic development and training had emerged as a local, state, and national issue. The Wisconsin legislation, the state Vocational, Technical and Adult Education Board, and the local Lakeshore Technical Institute (LTI) Board of Education placed major emphasis on economic development and training activities. Select administrators, supervisors, and coordinators were involved in promoting educational offerings and technical assistance to business and industry. However, the majority of staff at LTI did not accept or were unaware of economic development and training activities as a major institutional goal. The purpose of this study was to analyze the knowledge and attitude of the LTI staff as it related to economic development and training. The LTI staff represents five areas. Staff areas included administrative staff, Vocational, Technical and Adult Education (VTAE) certified management staff, noncertified management staff, instructional staff, and support staff.

A three-part design was used for the study. Part one included the development of an instrument to record the knowledge and attitude

of LTI staff regarding economic development and training. A validity and reliability study of the instrument was done. A pretest given to all full-time staff at the beginning of the 1985-86 school year completed part one of the research. All 220 full-time staff responded for a 100 percent rate of return.

Part two included limited in-service activities. The activities were made available to the administrative staff, VTAE certified management staff, and the noncertified management staff during the 1985-86 school year. The instructional staff and support staff groups did not receive formal in-service activities.

Part three was a posttest administered at the end of the 1985-86 school year to 214 full-time staff. An 80 percent rate of return was recorded with 177 staff responding. The pretest and post-test data were used to analyze changes in the knowledge and attitude toward economic development and training. Five hypotheses were tested.

Findings of the study resulted in the following conclusions: (1) there were differences in the knowledge of economic development and training activities between staff groups, (2) there were considerable differences in the attitude toward economic development and training activities among staff groups, and (3) a correlation may exist between the lack of knowledge of economic development and training and the attitude toward economic development and training. Conclusions made after in-service activities were conducted included: (4) the administrative staff and the VTAE certified management staff recorded increased knowledge of economic development and training activities and (5) the noncertified staff group did not experience a change in

knowledge. Additional conclusions were (6) that all of LTI's staff be involved in economic development and training in-service activities and (7) a positive attitude toward economic development and training must be fostered.

Study recommendations indicated that (1) the administrative staff accept the study findings, (2) the results be used to plan comprehensive in-service activities, (3) in-service activities be sequential in nature, (4) an evaluation process be developed to determine the in-service activities' effectiveness, (5) the communication process emphasize a free flow of information between program areas and economic development and training personnel, (6) staff groups having no direct involvement with the delivery of economic development and training activities be made aware of the vital role each has to economic development and training, (7) further study be conducted on the resistance to change as it relates to economic development and training, and (8) a Business, Industry, and Education Council be formed to provide a partnership for the economic development of the Lakeshore Technical Institute's district.

This study is significant to the field of economic development and training. First, the findings provided an analysis of current knowledge and attitude levels at Lakeshore Technical Institute. Second, the findings provided support for the recommendation of continued in-service in the process of achieving systemwide commitment to economic development and training. Third, the findings provided an identification of factors impacting the implementation of economic development and training activities at Lakeshore Technical Institute.

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CHAPTER 1

Introduction

The Wisconsin Vocational, Technical and Adult Education (WVTAE) schools have historically been educational institutions devoted to preparing people for initial employment. While occupational preparation continues to be a primary goal of VTAE, the upgrading and retraining of current workers "to keep up with technological changes in the workplace" (Wisconsin Legislative Reference Bureau, 1982:103) became a priority in the late 1970s and early 1980s. Classrooms were no longer on main campuses. Business and industry's on-site conference rooms became an alternative delivery site. The VTAE system became a primary provider of the training needs requested by business and industry.

The state of Wisconsin increased its efforts in economic development and training in the early 1980s. "A state's economic development refers to its growth in terms of the number of new businesses and expansion of existing businesses and industries" (Wisconsin Legislative Reference Bureau, 1982:15). The VTAE system became a partner to business and industry. In addition to training people for employment, the VTAE provided "training for workers already employed" and "training for workers for new industries" (Wisconsin Legislative Reference Bureau, 1982:152-3). Specific skill-related seminars, support for innovation, and technical assistance were additional services the VTAE system provided to the state of Wisconsin's businesses and industries.

Background and Significance

Development of the Wisconsin Vocational, Technical and Adult Education System

The Wisconsin Vocational, Technical and Adult Education (WVTAE) system has been in existence for seventy-five years. Vocational-technical education began in Wisconsin in 1911. Legislation was passed requiring municipalities that had populations of 5,000 or more to provide "continuation, trade, and evening schools" (Wisconsin Legislative Reference Bureau, 1982:100). A five-member local board governed each school.

The state board, named the State Board of Industrial Education, was to have equal labor and management representation. The responsibility of curriculum was delegated to the state superintendent of public instruction. "Part-time education for employed youth, apprentice school, and evening adult" (Wisconsin Board of Vocational, Technical and Adult Education, 1976:1) were the three major areas of instruction in the VTAE institutions.

The federal Smith-Hughes Act, enacted by congress in 1917, established a Federal Board of Vocational Education and provided federal funds for vocational education in trade and industry, home economics, agriculture, and teacher training (Greiber, 1975:18). The state of Wisconsin enacted Chapter 656 and changed the Board of Industrial Education to the State Board of Vocational Education. The State Board of Vocational Education was made independent of the State

Superintendent of Public Instruction and now included three farmers. University representatives on the first board were replaced by Industrial Commission members.

Twenty-three continuation schools, governed by the State Board of Vocational Education, were in operation by 1912. However, student population changed during the next twenty years. More students, more older students, compulsory attendance law, and additional occupational programs impacted the enrollment. By the late 1930s, the state of Wisconsin had forty-three vocational education schools. During World War II, the schools trained workers for defense industries and to increase farm production (Greiber, 1975:30). The schools were "operating twenty-four hours a day, seven days a week" (Wisconsin Legislative Reference Bureau, 1982:101-102). The postwar veterans returned to school to pursue an occupational career.

In 1947, the State Board of Vocational Education adopted a policy that state aid would not be provided for nonoccupational courses. Apprenticeship, home economics, and agriculture areas continued to grow. Demand from students and increased funds from the George-Ellzy Act and the 1946 George-Barden Act stimulated the growth (Greiber, 1975:36). During the 1950s, hotel and restaurant cooking, training of volunteer fire fighters, practical nursing, aviation mechanics, technical business education, and electrical technology were added programs. Requests for new programs in new areas of the state were submitted to the state board.

In 1957, the Wisconsin legislation attempted to enact Chapter 453 (Greiber, 1975:44). Area school provisions were "a minimum area population of 20,000, an equalized evaluation of $60,000, an elective area board, and a 2.0 mills tax levy" needed to support the program. The proposed elective board was a roadblock, and the Chapter 453 area school was never exercised.

Technological programs continued to increase. To give recognition of the change, the State Board of Vocational Education name was changed to the Wisconsin Board of Vocational, Technical and Adult Education (WBVTAE) in 1965 (Wisconsin Legislative Reference Bureau, 1982:102). The federal vocational act of 1963 provided funds to the state for construction of area facilities. The 1963 act also enabled high schools to offer vocational business and office, distributive education, health occupations, and trade and industry programs.

Wisconsin legislation was passed in 1965 mandating that every Wisconsin citizen had to be in a vocational, technical, and adult education district by 1970 (Wisconsin Legislative Reference Bureau, 1982:103). Sixty-five independent vocational, technical, and adult education schools were in operation at the time. A planning committee was formed to establish redistricting criteria. Representatives from the Wisconsin Board of Vocational, Technical and Adult Education, Wisconsin Department of Administration, Coordinating Committee for Higher Education, and the Wisconsin Department of Resource Development served on the committee. The committee proposed eighteen VTAE districts. The districts were formed using the following criteria:

1. Each district was able to annually serve 780 full-time equivalent (FTE) students per year.

2. Twenty-four occupational program areas were recommended.

3. The twenty-four occupational program areas were to be from agriculture, home economics, business and marketing, trade and industry, and health disciplines.

4. The district boundaries were to be county lines. The exception was if public education districts' boundaries were not county lines.

5. Each new district's tax base was to be sufficient to cover the anticipated facility debt service and operational costs of programs at a rate not to exceed 1.5 mills (Wisconsin Legislative Bureau, 1982:140).

Two of the proposed districts merged with two other proposed districts. Sixteen VTAE districts were formed. Each district was governed by a seven-member local board. Figure 1 depicts the sixteen VTAE Districts that were approved for operation July 1, 1973.

Effective July 1, 1985, district board membership consists of nine members who are district residents. The members are to include "three employers who have power to employ and discharge, three employees who do not have the power to employ or discharge," two members-at-large, and a school district administrator (Wisconsin Board of Vocational, Technical and Adult Education, VTAE Selected Statutes, 1982:38-4). Two members must be elected officials. The county board chairs of the district appoint board members following an application

Figure 1

Wisconsin Vocational, Technical, and Adult Education Districts and Campuses Approved for Operation July 1, 1983 (Wisconsin Vocational Studies Center, 1979:47)

process. The Wisconsin Board of Vocational, Technical and Adult Education gives final approval of appointed local board members.

Lakeshore Technical Institute (LTI) is one of Wisconsin's sixteen districts. It is operated under the jurisdication of the WBVTAE. LTI has its main campus in Cleveland, Wisconsin, which is the geographic center of the district.

Development of Economic Development and Training Within the Wisconsin Vocational, Technical and Adult Education System

Fostering economic development and training of the district and the state is identified as one of several "special focus needs" in the 1976 WBVTAE procedures manual (Wisconsin Board of Vocational, Technical and Adult Education, 1976:26). It was encouraged that "VTAE districts work to upgrade and encourage the economic growth of their communities." Services were to be made available to employers in order to enhance the potential to expand local enterprises and to initiate and develop new products.

Economic development and training is defined as economic growth of the district's and state's business and industry. The educational offerings section of the 1976 WBVTAE plan (Wisconsin Board of Vocational, Technical and Adult Education, 1976:37) recommended:

> Each district should document the attempt to develop and implement a business and industrial liaison program which will have as its major goal the stimulation of the creation of jobs by July 1, 1977, and

> Each district should maintain an inventory of all businesses and industries with ten or more employees, detailing type of industry and identified training needs for each industry cataloged. This will be totally accomplished by January 1, 1980, and updated regularly.

Business and Industry Liaisons (BAIL) coordinators were employed and "responsible for planning services necessary for effective business and industrial liaison within the VTAE district" (Wisconsin Vocational Studies Center, 1979:24). When business and industry liaison activities began declining, the BAIL acronym was thought to be a negating cause. Concurrently, the state of Wisconsin Department of Development began addressing the economic development and training needs of the state. In 1979, the BAIL acronym was replaced with economic development and training coordinators.

In 1983, the Wisconsin legislature passed Assembly Bill 1012. Vocational, Technical and Adult Education System Mission and Purposes' Eligible Labor Training Program Costs is found in Chapter 38.001(2). "The principal purposes of the vocational, technical, and adult education system are to (Wisconsin Board of Vocational, Technical and Adult Education, 1985:75):

1. Provide occupational education and training programs, including the training of apprentices, that enable residents to obtain the knowledge and skills necessary for employment at a technical, paraprofessional, skilled, or semiskilled occupation . . . .

2. Provide customized training and technical assistance to business and industry in order to foster economic development and training and the expansion of employment opportunities.

The state VTAE addressed the legislative directive by including economic development and training activities in the state goals. The state goals were included in the Lakeshore Technical Institute's 1984-85 Planning Document (1984:12):

1. Define VTAE role in reducing Wisconsin unemployment.
2. Increase commitment to work force development/transition and elimination of barriers to training and employment.
3. Develop improvements in gathering and disseminating labor market information and forecasting training needs, working cooperatively with appropriate state agencies, business associations, and organized labor.
4. Improve cooperation with the Department of Development, business, and industry on economic development and training.
5. Review for possible adoption recommendations for economic development and training by Commission 85.
6. Develop statewide internship program with business and industry.

For the current school year, 1985-86, the state VTAE revised the earlier goals. Lakeshore Technical Institute's 1986 Planning Document (1985:9) includes the 1985-86 state goals. It reads:

> Expand customized training and technical assistance for business and industry to foster Wisconsin's economic development and employment opportunities. Close cooperation will be necessary between the VTAE system and the state's private sector to meet the changing economic development, employment, technological, and training needs of business and industry by providing services which will assist an existing firm to expand, be more productive, or which will attract new industry.

At the discretion of each district director and administrative staff, economic development and training activities vary among the sixteen Wisconsin Vocational, Technical and Adult Education districts. The Lakeshore Technical Institute administration created a BAIL

position in 1978. In 1980, two BAIL coordinator positions representing business and trade and industry program areas were developed. The BAIL coordinator acronym was changed to economic development and training coordinator in 1981. A third economic development and training coordinator representing the human services areas was added for the 1983-84 school year. A fourth economic development and training coordinator representing allied health and nursing was added for the 1985-86 school year. The goals of economic development and training as described in LTI's planning document (Lakeshore Technical Institute, 1984) include:

1. Providing a link with the business, industry, and human services organizations through direct visits.
2. Involving chambers of commerce, professional associations, and trade associations.
3. Providing in-plant training for workers already employed.
4. Providing short-term courses or seminars on campus within the LTI Business and Industry Conference Center.
5. Providing retraining of employees to update them for changes resulting from technological innovations.
6. Providing preemployment training conducted for prospective employees before a new plan opens or an existing one expands or relocates.
7. Developing and maintaining a continuous assessment of area business, industry, and human services training needs.

The 1985-86 strategic plan was written by the LTI board of education. Board members reviewed the institution's past, present, and future mission. Economic development and training activities were included as three of the four priorities for the future (Lakeshore Technical Institute, 1985:9-10). The mission statements relating to economic development and training and receiving primary emphasis were:

1. Retraining and upgrading for existing and new jobs: Ongoing degree/diploma programs, special training courses, and projects of varying lengths offered on a full-time or part-time basis for upgrading the knowledge and skills of unemployed or present workers to function with the new technologies to get a job, keep a job, or be promotable.

2. Related training for apprentices: Related (theoretical) training for apprentices. Apprentices are indentured (i.e., have an agreement with an employer signed by the apprentice, employer, JAC [Joint Apprenticeship Committee], and representative of the Apprenticeship Division of the Wisconsin Department of Labor and Human Relations).

3. Economic development and training related to customized training and contract services: Educational programs and services provided to district firms or potential firms to assist in their employment and job requirements. These include both regular and customized programs and services on an aidable, contract, or project basis.

The mission statement receiving some emphasis with regard to economic development and training activities included:

> Coordination with other educational institutions and governmental bodies: Working with other educational institutions, government agencies, and community organizations to offer educational programs and services (within the LTI mission) utilizing the strengths of each with a minimum duplication of effort.

Development of the State of Wisconsin's Department of Development

The present state of Wisconsin's Department of Development was created by Chapter 361 during the formation of the 1979 laws. Prior to Chapter 361, a variety of departments existed. Departments and laws were revised until the final merger and creation of the Department of Development.

In 1955, the Division of State Economic Development was formed. The division was part of the executive office. A Wisconsin office of

Economic Opportunity was created after the 1964 Federal Economic Opportunity Act was passed. Both divisions were merged when the 1967 Wisconsin laws created the Department of Local Affairs. The department served as a link between the governor and state agencies whose activities impacted community problems and plans. Chapter 211, Laws, 1967, described the purpose of the Department of Local Affairs and Development (Wisconsin Legislative Reference Bureau, 1968:491). The purpose included fostering

> closer cooperation and coordination between state and local governments so they may continue to fulfill their traditional roles in our system of government; to foster and encourage a pattern of state-local relationships that facilitate effective development and utilization of state and local resources in meeting citizen needs; to promote the development and maximum wise use of the natural and human resources of the state so as to provide a balanced and dynamic economy; and to insure that the state is prepared to cope with the emergencies resulting from enemy action and natural disaster.

Chapter 321, Laws 1971, established the Department of Business Development. The department was official in July of 1972. The department was to act as an "advisory, informational, coordinative, and promotional" (Wisconsin Legislative Bureau, 1973:376) resource to help in the growth and diversity of the state of Wisconsin. The department

> is charged with providing assistance to commercial, industrial, and recreational developers and to small and minority enterprises; encouraging the creation of jobs in depressed areas; encouraging cooperation between financial institutions and businessmen in order to stimulate business expansion; and the developing of a state economic policy.

The Department of Local Affairs (begun in 1967) and the Department of Business Development (begun in 1972) existed until the laws of 1979 merged the two. The Department of Development (DOD) was

the new name. Several divisions exist within the DOD. The Division of Economic and Community Development, Division of Housing and Community Services, Division of Policy Development, Division of Tourism, and the Division of Support Services are the components of the DOD. The department

> serves as the state voice of development, with responsibilities in the areas of community and economic development, housing development and rehabilitation, small and minority business assistance, federal-state-local relations, state economic analysis, local and regional planning, industrial attraction, international trade, development of new and innovative approaches to economic and community development, and tourism promotion and development (Wisconsin Legislative Bureau, 1983:389).

The Wisconsin Department of Development's mission is to assist in the retention and expansion of in-state corporations. The DOD offers assistance from business consultants employed by DOD. Financial assistance information using federal, state, and/or local financing is also available from DOD. Thirty-two financing alternatives including long-term capital, short-term capital, unforeseen damages, export financing, research grants, public works and renovation, energy and environment, and labor training were listed in the March publication of DOD (Wisconsin Department of Development, 1984:3). Other DOD programs include: (1) a technology development fund to assist in the production of new products, (2) an employee assistance program to promote and assist in employee buyout of businesses/companies, (3) permit information center to assist in the expediting of permits, (4) an export mentor program (matching current business/industry exporters with a smaller business/industry that is not currently exporting), (5) the

organizing of a Development Preparedness Task Force, and (6) a toll-free telephone number, 1-800-HELP BUS ('ness).

Development of the State of Wisconsin's Forward Wisconsin

Forward Wisconsin Incorporated is Wisconsin's "economic development marketing corporation. It is a unique public-private cooperative adventure" (Forward Wisconsin, no date:1). Forward Wisconsin was recommended to the state legislators in 1983 by the Marketing Wisconsin Task Force. Forward Wisconsin's mission is to improve the state of Wisconsin's image, both internally and externally. If perceptions of Wisconsin are incorrect, Forward Wisconsin provides accurate, current data. Attracting industry to Wisconsin is another part of Forward Wisconsin's mission.

Forward Wisconsin was incorporated in 1984. Patrick LeSage was hired as president. Offices in the state of Wisconsin were opened in Milwaukee, Menomonie, and Madison.

Forward Wisconsin activities are funded with legislative appropriations that are matched with private sector funds. Private sector includes utilities, banks, law offices, and educational institutions. Forward Wisconsin is governed by a board of directors representing public and private sector. The lieutenant governor, who is also the secretary of the Wisconsin Department of Development, and the governor are board members. Forward Wisconsin activities include out of state prospecting trips, preparation of relocation proposals, and marketing efforts directed at out-of-state businesses.

Summary

The emphasis and restructuring of Wisconsin's VTAE system, the state of Wisconsin's DOD, the creation of Forward Wisconsin, and LTI's strategic plan identified economic development and training as a current issue. The legislature and elected state officials recognized that the state's economy depended on the retention and growth of current businesses, industries, health, and human services agencies. The Department of Development assumed that mission. Forward Wisconsin was initiated to attract new businesses, industries, health, and human services agencies. The retention, growth, and addition of corporations required training. At the same time, the VTAE districts were experiencing a decline in full-time, posthigh enrollments. Adult student population statistics, on a national level, are best described by Cross (1981:3).

> The United States is becoming a nation of adults. . . . With the exception of the World War II years, children under the age of fifteen have always been the largest single age group in the nation . . . . In 1980, numerical dominance shifted to those between the ages of fifteen and twenty-nine. By the year 2000, the largest age group will be thirty to forty-four years old with a rising curve for forty-five to sixty-four years old.

Ostrand (1984:21) cited demographics that the age group twenty-five to forty-four years of age will grow at the rate of 26 percent in the next ten years. Growth statistics for the LTI district concur with Cross and Ostrand. These statistics and the projections of the future work force affect LTI's economic development and training activities.

Lieutenant Governor Flynn (1985), serving as secretary of the Wisconsin DOD, predicted the future impact of this age group's growth. He stated:

> Eighty percent of the jobs in 1988 are not created now.
>
> Ninety percent of the people filling those jobs in 1988 are currently in the work force.
>
> Seventy-five percent of the people filling jobs in the year 2000 are in the work force today.

The significance of the aging statistics and the emphasis on job/corporation retention impact economic development and training activities at Lakeshore Technical Institute. The older, employed adult, as a student, can fill instructional time available because of enrollment decline of posthigh students. The older, employed adult will change careers as the job market changes. Additional and/or new skills will be needed by the older employed adult. The early VTAE and business/industry partnership identified the significance of economic development and training. Logan (1985:13) quoting Robert Sorensen, state director of the Wisconsin VTAE system, stated:

> The VTAE System became extremely active in the customized labor training program administered by the Wisconsin Department of Development during 1983-84. Over 8,000 different courses, classes, or seminars were provided to more than 23,000 workers and supervisory personnel in industry-specific training programs. A continuing and expanded effort is planned in the 1985-87 biennium.

The study is significant to the seven Nova seminars. George Mehallis (1982:no page), national lecturer for the Nova Seminar The Emergence of Vocational, Technical, and Occupational Education in America, identified individuals "whose occupations have disappeared from the labor market, older workers in need of retraining, and workers

needing upgrading" as a new student population. Averill (1983:34) concurred. "The time has never been better for expansion of training services offered by public education: the fastest growing educational market today is in employment-related training."

The new student population also impacted the curriculum and learning theory. The statement of the problem cites LTI staff resistant to becoming involved in economic development and training activities. Teaching in business/industry's classrooms changed the traditional setting. The location was not traditional nor were the students. The students were employed individuals expecting a teacher to facilitate learning using educational alternatives and strategies, contemporary theories, and building upon the students' past experiences.

The economic development and training activities were being requested as a result of societal factors. The knowledge explosion and technological change resulted in workers needing retraining. Many economic development and training students were older workers faced with retraining or job loss. The study dealt with LTI's planning for the future, for changes, and for organization renewal.

The study used a research design, data collection techniques, and a statistical analysis reflective of the Applied Educational Research and Evaluation Seminar. The preparation of the report validates the research competencies. The conclusions of the research were used to write recommendations that made the study valuable to LTI as an educational facility.

The new student population and the change from the traditional posthigh school student impacts LTI's personnel and the governance of the personnel. The study provided documentation of the attitudes and knowledge of the LTI staff as related to economic development and training. The study included limited in-service activities for three staff groups. The results support the recommendation for staff in-service for the instructional and support staff at LTI. The increased educational activities in economic development and training and the decreased educational offerings resulting from the declining posthigh school enrollment required human resource management, including preparing staff for change, reassignment of staff, layoffs, and maintaining employee self-esteem.

Statement of the Problem

Economic development and training emerged as an issue of the 1980s. The problem was that the majority of staff at LTI did not accept or were unaware of economic development and training activities as a major institutional goal. While select administrators were promoting educational offerings and technical assistance to businesses and industries, several supervisors and coordinators were unaware of the economic development and training emphasis, were experiencing resistance to teaching in business and industry from their respective staff, and were forming individual attitudes. An economic development and training team (initially three coordinators supervised by the associate administrator of adult and continuing education) was formed in 1983.

The lack of knowledge concerning economic development and training was negatively influencing the implementation of economic development and training on a districtwide basis.

An in-service speaker at LTI (Nitschke, 1984) had told the management and administrative group, "Things aren't going to get better--they're going to get different. If you resist, they will get worse. You must take the risk of change." Economic development and training were both different and a risk to many of the LTI staff. Without a more complete knowledge base of economic development and training, the LTI staff would be segmented into different camps based on the differences of knowledge and attitudes.

Purpose of the Study

The purpose of the study was to analyze the knowledge and attitude of LTI staff as it related to economic development and training. To create attitude change, the staff needed additional knowledge. Limited in-service activities were provided during the study. Knowledge that was disseminated included the history of economic development and training, the VTAE system and state of Wisconsin's scope of economic development and training, and the significance of economic development and training to the LTI district's businesses, industries, health and human services agencies, the school, and the staff. The visioned purpose of the study was that economic development and training become a mission of LTI that was understood and supported by all members of the LTI staff.

Research Questions

1. Was there a difference in the knowledge of economic development and training between administrative, VTAE certified management, noncertified management, instructional, and support staff?

2. Was there a difference in the attitude toward economic development and training between administrative, VTAE certified management, noncertified management, instructional, and support staff?

3. Was there a difference in the knowledge of economic development and training when comparing the pretest and posttest data from the three staff groups receiving limited economic development and training in-service activities and the two staff groups receiving no economic development and training in-service activities?

4. Was there a difference in the attitude toward economic development and training when comparing the pretest and posttest data from the three staff groups receiving limited economic development and training in-service activities and the two staff groups receiving no economic development and training in-service activities?

5. Was there a difference in the knowledge based on the length of staff employment at LTI?

6. Was there a difference in the attitude based on the length of staff employment at LTI?

7. Was there a difference in the knowledge of the LTI board's strategic plan statements and emphasis between administrative, VTAE certified management, nopncertified management, instructional staff, and support staff?

Hypotheses

Research questions one, two, three, four, and seven were rephrased into five null hypotheses.

1. There will be no difference in the knowledge of economic development and training between administrative, VTAE certified management, noncertified management, instructional staff, and support staff.

2. There will be no difference in the attitude toward economic development and training as recorded by administrative, VTAE certified management, noncertified management, instructional staff, and support staff.

3. There will be no difference in the knowledge of economic development and training between the three staff groups receiving in-service training activities and the two groups receiving no formal in-service training activities.

4. There will be no difference in the attitude towards economic development and training between the three staff groups receiving in-service training activities and the two groups receiving no formal in-service training.

5. There will be no difference in the awareness of the LTI board's ten strategic plan statements and emphasis between the administrative, VTAE certified management, noncertified management, instructional staff, and support staff.

Definition of Terms

Administrative Staff - A management person hired to provide administrative services for the educational goals of the institution.

The administrative affairs include general operations, finances, student services, and educational services (including adult and continuing education and posthigh programs).

Androgogy - "The art and science of helping adults learn" (Davenport quoting Knowles, 1985:152).

Attitude - "An organismic state of readiness to respond in a characteristic way to a stimulus (as an object, concept, or situation)" (Webster's New Collegiate Dictionary, 1981:72).

Corporate Connection - A public relations program designed to further LTI's involvement in economic growth of the district. The program has meetings with chief executive officers and includes a newsletter.

Dislocated Worker - An individual who is permanently released from employment due to the corporation's relocation or reorganization or closing, or an individual who is indefinitely laid off because of present skills. The individual has little or no chance of recall into similar employment.

Economic Development and Training - The training, upgrading, and retraining of business, industry, health, and human services employees. Economic development and training may include educational courses for new or existing employees, technical assistance, and/or dislocated worker activities.

Economic Development and Training Coordinator - A management person hired to coordinate employment related continuing education offerings for employed individuals.

Instructional Staff - An individual hired, under the provisions of the negotiated contract, to teach the educational offerings. Each is required to meet WBVTAE certification requirements.

Knowledge - "The fact or condition of knowing something with familiarity gained through experience or association . . . the fact or condition of having information" (Webster's New Collegiate Dictionary, 1971:683).

Lakeshore Technical Institute (LTI) - One of the sixteen VTAE districts in the state of Wisconsin. The area encompassed by the district is made up of Manitowoc County, Sheboygan County, a portion of Calumet County, and a portion of Ozaukee County.

Noncertified Management Staff - Employees hired for the supervision of noninstructional departments (example, Personnel, Maintenance, Word Processing, etc.).

Nonoccupational Courses - Classes that have content relating to leisure time or self-enrichment activities.

Strategic Plan - A plan concerned with the entire operation of the organization. "Top management develops the directional objectives for the entire organization, then progressively lower levels of management develop compatible objectives and plans to achieve them. As the planning process moves down the organization, the topics of the objectives and measures of success become more specific" (Plunkett and Attner, 1983:99).

Support Staff - Individuals hired to provide noninstructional (ancillary) services for the educational goals of the institution.

Vocational, Technical and Adult Education (VTAE) - The term used to refer to the Wisconsin system of vocational, technical and adult education.

VTAE Certified Management Staff - Coordinators and supervisors are responsible for the coordination and management of the educational programs. They are required to meet WBVTAE certification requirements.

Wisconsin Board of Vocational, Technical and Adult Education (WBVTAE) - "The sole agency responsible for the administration of the state plan [Wisconsin Vocational Education] and for the supervision of the administration thereof by local educational agencies and has all necessary power to cooperate with the United States Office of Education in the administration of the state plan" (Wisconsin Board of Vocational, Technical and Adult Education, 1976:1).

Limitations

The study was limited to staff of LTI that were employed full time at the beginning of the 1985-86 school year. Individuals hired between the administration of the pretest and posttest were not included in the study. Individuals who left employment between the administration of the pretest and posttest were included in the pretest results only. Findings cannot be generalized to other school years, other collective staff groups, or to schools in other geographic locations. The study can be procedurally duplicated in other educational institutions providing the instrument is revised for the specific institution's use.

In-service activities were limited to LTI staff in administration, VTAE certified management, and noncertified management. The study was designed to document knowledge and attitude base. The limited in-service activities were presented to document the change that could be created from planned in-service activities. The limited in-service training activities were presented to a total of 44 members of the staff from a total staff population of 259. The instructional and support staff members received no formal in-service activities.

The data collected for the study were limited to the accuracy and honesty exercised by the participants while completing the pretest and the posttest. The perception of economic development and training was limited to each participant's past experience or association. The pretest and posttest were administered without introductory comments.

Prior awareness of the LTI board of education's strategic plan may have affected a change in the perception of economic development and training perceptions. Access to the preliminary strategic plan draft may have also affected responses. The study was limited to the data received from the pretest and the posttest. There was no comparison of LTI staff who were and were not involved with economic development and training.

Assumptions

It was assumed that responses received from the pretest and posttest were accurate reflections of individuals' feelings. It was assumed that individuals responded without prejudice. It was assumed

that the data gathered from this study would be valuable in the preparation of future in-service training activities for the instructional staff and the support staff at LTI.

CHAPTER 2

Review of Related Literature

Introduction

During the past decade, Wisconsin's Vocational, Technical and Adult Education (WVTAE) system, the state of Wisconsin's Department of Development (DOD), Wisconsin's Forward Wisconsin, and Lakeshore Technical Institute's (LTI) strategic plan identified economic development and training as a current issue. During the same time period, business and industry were creating and conducting large and growing amounts of education to facilitate individual corporation's economic development. As a result of business and industry training needs, eighteen degree-granting schools are in operation today that are owned by business and industry. The initial reason for beginning the schools was to meet business and industry's specific educational needs (Boyer quoted by Eurich, 1985:48). Yet little is known about the total scope of the interrelationships between corporate education and higher education (Gold, 1981:109). Gold implies too little is known about the breadth and depth of corporate education and training. Too little is known about the extent to which higher education contracts with private and public corporations for providing education and training. Too little is known about the thrust toward human resource development within corporations, higher educational institutions, and unions. Too little is known about the training needs of health and human service agencies.

The purpose of this study was to analyze the knowledge and attitude of LTI staff members as it impacted economic development and training activities. It was perceived that economic development and training efforts were being hindered by a lack of knowledge about economic development and training activities and a less than positive attitude toward economic development and training. The review of literature examines (1) the relationship of economic development and training to the economy, (2), business' and industry's educational needs, (3) implications for educational institutions, and (4) documented recommendations for the future.

Economic Development and Training and Its Relationship to the Economy

Economic development is defined by state officials as Wisconsin's growth in terms of the numbers of new businesses and expansion of existing businesses and industries (Wisconsin Legislative Reference Bureau, 1982:15). Wisconsin's economy is dependent upon a skilled work force. Groff (November, 1984:44) described the past relationship of postsecondary education to the economy in "terms of providing a trained work force." A skilled work force is necessary in entry-level positions. However, retraining and upgrading for the currently employed and training employees for new industries will increase in the future.

North Carolina's community college system created one of the first training services "especially designed to support industrial growth" twenty-five years ago. The training services created "a

healthy business climate" that, in turn, improved the state's economic well being. North Carolina's college officials prided themselves in meeting new industries' demands for specifically skilled workers and in meeting existing industries' upgrading and retraining needs (Holdsworth, 1984:25).

The state of Wisconsin's Department of Development identifies the state's vocational, technical, and adult education system as a partner and resource when relocation is discussed with out-of-state businesses and industries. Johnson (1984:1) concurred, calling academic institutions a critical resource in reviving older businesses and industries as well as inspiring new businesses and industries. Three resources cited by Johnson (1984:1) as important considerations when corporations relocate are: (1) the need for high technology training, (2) the responsiveness to business and industry needs by the educational institution and community, and (3) the availability of continuing education for workers.

The first resource identified was high technology training. The information age includes new equipment and new job skills. The label "high tech" has been given to many new job skills using new equipment. Often the training must be employer specific. However, while Johnson (1984:1) cited high technology as a crucial issue in retraining, Groff (November, 1984:44) stated that not one of the ten projected growth job categories, as predicted by the United States Department of Labor, was high technology. The report projected that less than 10 percent of new jobs would be high technology.

Education's responsiveness to business and industry's needs was the second resource cited by Johnson (1984:1). Quick responses to training needs was also one of the ten critical elements of retraining that Warmbrod (1983:19) listed. The profit and loss of corporations can be dependent on timely training and retraining.

It is estimated that by the year 2000, nearly half of the skilled work force will have obsolete jobs (Johnson, 1984:2). Seventy-five percent of the present work force will still be employed in the year 2000 (Groff, November, 1984:44). Ninety percent of the current nation's work force will still be employed by 1990.

Gold (1981:95) summarizes several career developers predictions that the average worker will hold up to eight different jobs in a lifetime. It is projected that the jobs will not necessarily be related, and workers will continually assume new job functions. Gold (1981:95) concludes that education provided at the workplace will be vital to the corporations and the economy.

Retraining and/or upgrading of the work force provides employees with steady employment. The John Naisbett Trend Letter (1986:4) described the April 1984 settlement between United Steel Workers and Pittsburgh's National Steel Corporations. The union gave management the power to combine jobs and reduce the size of job crews in return for job security of the employees. An employee whose job was terminated was reassigned or transferred to an "employment security pool" for retraining. If training and/or retraining is postponed, so is production and corporate profit. Educational institutions must be

flexible in order to respond to existing business and industry's changing needs.

Serving the needs of new business and industry is equally crucial to the economy. New businesses were cited as the creators of 80 percent of the new jobs (Groff, November, 1984:44). The new businesses are often less than four years old and have fewer than twenty employees. Therefore, solicitation of new business and industry and responding to their training needs are vital to a growing economy.

The third resource that education can provide is accessibility to continued lifelong learning (Johnson, 1984:1). Employers are using continued learning as an incentive and/or fringe benefit for employees (Harmon, 1985:7). Corporations often provide for tuition reimbursement and encourage study for job advancement. While lifelong learning allows for personal growth and development, it also contributes to the economy. Martonana and Garland (1984:19) noted that each of the United States had legislated the promotion of economic development. "It [economic development] creates a new limelight for expression and recognition of the commitment these institutions [educational] have to serving local businesses' and industries' needs for a trained work force."

Business and Industry's Educational Needs

Work Force History

Employment in America began as agrarian. Individuals worked independently and with muscle for sustenance of family and self and

food production for others (Eurich, 1985:25). Inventors and craftsmen preceded the Industrial Revolution. The Industrial Revolution required preparing people for specific jobs with specific training. Apprenticeships were begun as a result of company needs. Farming became mechanized (Lynton, 1984:1). The transportation industry flourished. In the late 1800s, "manual training" began to prepare individuals for industrial careers.

The country is now moving from a postindustrial age to an information age (Morse, 1984:1). Technology is changing rapidly. Jobs are more specialized. Anderson (1978:72), a presenter at the Changing Work Force Needs With Implications for Higher Education conference, stated that "We know that a piece of equipment is going to wear out technologically and, therefore, must be replaced." He continued to compare obsolete equipment with people who become technologically obsolete. However, companies invest in training of people to insure that the employees remain skilled and that the business stays competitive. "No longer can learning stop when traditional education ends: People at all levels and professions must continually upgrade their skills and knowledge" (Morse, 1984:1). Displaced workers will have to be "trained or redirected" if they are to find employment again (Lynton, 1984:1).

Worker Demographics

The national, state, and local economies rely on the employment of the people. Several trends influence the economies. Strang (1982:135-136) cites a maturing labor force whose numbers will grow

slower than in previous decades. Reinhardt (1978:38), speaker at the Changing Work Force Needs With Implications for Higher Education conference, concurred, stating that "by 1990, the twenty-five through forty-five year old will dominate the labor force."

Workers are being replaced with technology, including robotics and computer-aided manufacturing processes (Eurich, 1985:22). To maintain employment, individuals must remain skilled or reskilled in the changing world of work. Individuals once prepared for a lifetime career. Currently individuals are finding a need to become skilled for many different careers in a lifetime. Eurich (1985:22) projects that adults will change jobs or tasks four to five times in their work lives.

Merle Bodine (1978:69), a presenter at the Changing Work Force Needs With Implications for Higher Education conference, stated, "Industry stresses a definite need for an education that prepares its people for 'how to change.'" Coping with change and implementing change appear to be two constants in the future world of work. A working population that is growing older, trained for obsolete jobs, and resistant to change cannot contribute to the productivity of businesses and industries. However, the national, state, and local economy are relying on these employed workers.

Lynton (1984:126) discussed a further consequence of the demographic changes of employees. The middle aged worker will find it difficult to move up in an organization because most upper levels of organizations are filled with relatively young individuals. In

addition to companies sponsoring education to improve employee performance in a present job, companies are supporting education to prepare employees for new responsibilities or to maintain competence with new knowledge and technology (Lusterman, 1977:1).

Business' and Industry's Needs

"Productivity and enrichment of the worker are the companies' goals" (Eurich, 1985:47). This requires the best worker for each job. Changing technology, technological application, concern for productivity, and international and domestic competition have necessitated the development of corporate education and training programs. The investment in education was projected by the American Society for Training and Development at $30 billion annually in 1981 (Gold, 1981:29-30). Private and public sector are involved in education of employees. The federal government reported 33.3 million hours of training for over 2 million civilian employees in 1979.

Land and equipment are no longer the primary factors in corporate economy. The investment in human resources is as critical as the physical assets (Eurich, 1985:x). Morse (quoting Carvevale, 1984:1) estimates 75 percent or more of "the nation's growth in products" can be attributed to the human growth factor. Individuals make up the human resource of a corporation. However, the corporation provides corporate training and development based on the needs and priorities of the corporation rather than "in terms of the optimal development of the individual (Gold, 1981:70). Gold (1981:37) viewed corporate training (continual skill acquisition) as similar to the lifelong learning theme

in education. The difference is that the corporate goal is improved organizational performance as a result of the individual's continuing education and development.

"The work force constitutes a long-term investment" (Gold, 1981:69). An outward, visible confirmation of this belief is the development of human resource departments or the renaming of personnel directors to human resource managers. The corporation maintains, refurbishes, and renovates the work force (human resources) just as it would the physical resources. A quote from Andrew Carnegie (1986:7) reflects the corporation's investment in human resources. "Take away my people but leave my factories and soon grass will grow on the factory floors. Take away my factories but leave my people and soon we will have a new and better factory."

Corporate Educational Systems

Gold (1981:29) projected $30 billion being spent annually on corporate education in 1981. Eurich (1985:ix) projected $40 billion annually only four years later. Eurich (1985:22) compared the amount spent on corporate training as "approaching the total annual expenditures of all America's four-year graduate colleges and universities." The number of individuals involved in corporate training is close to 8 million--the same as enrolled in American colleges and universities. Corporate education must be recognized as an educational opportunity for adults.

Corporate education was begun out of necessity. Lynton (1984:132) summarized corporate education in three categories.

Recurrent education (1) was essential for job maintenance. Emerging education (2) was essential for the maintenance of occupational effectiveness. New concept education (3) was essential for occupational maintenance.

Recurrent education replaces experience (Lynton, 1984:8) initially acquired through apprenticeships and manual training. Knowledge has become a central economic resource. Work skills are either general--to the degree that they are applicable to a variety of jobs--or they are specific and are limited to a particular job and perhaps a specific corporation (Lusterman, 1977:61). Specific skills are often not transferrable. Lynton (1984:6) concurred that the nature of employment was changing. A growing number of entry-level jobs require a specific level of skill and sophistication. Morse (1984:1) cited a reluctance by employees to enter the education world. However, the corporation's economy necessitated meeting the skills in some way. Recurrent education improves the skills and performance of employed individuals in their present jobs (Lusterman, 1977:5).

Emerging education resulted from the need to keep abreast with changes in knowledge and the skills required by the knowledge change (Lusterman, 1977:5). Eurich (1985:22) compared the necessity of education and training today with the necessity of education and training after the first Industrial Revolution. The difference is that the pace has quickened. Eurich (1985:22) continued:

> Manufacturing processes are moving into a new phase technologically controlled; robotics are coming into position, and communications will create jobs still only imaginable; and service industries and nonmaterial consumables are expanding to all sorts

> of human needs; and health services and care are rapidly expanding. The computer world with their networks, biotechnology, and aerospace development all challenge the working world to keep up.

A misfit between workers' capabilities and the technical skills to do the work has resulted (Eurich, 1985:134). To remain employed, individuals must obtain new skills. Gold (1981:22) described the emerging educational need as critical for cyclical retooling of working adults. This supports the emphasis placed on human resource development by corporations.

Barton (1983:24) proposed another facet of emerging education. Earlier discussion was to retool currently employed with the expectation that the current employer has a new job for an existing worker. Barton addressed the needs of the worker who may be displaced, proposing that retooling happen prior to or in preparation of displacement. "This means reaching employed workers with counseling and information about the changing occupational world" (Barton, 1983:24). Corporations would invest in the future of the current worker with paid tuition aid programs, thereby renewing business and industry's commitment that education and training are lifelong ventures. The employed individual would be retooled for another corporation's employ. The 1980 Assembly on Industry Education Cooperation (sponsored by American Association of Community and Junior Colleges, the American Society of Training and Development, and the American Vocational Association) endorsed this "investment" approach as an absolutely necessary investment for the nation's future (Gold, 1981:43). The Assembly on Industry and Education Cooperation further

recommended that the occupational upgrading, retraining, or advancement be shared financially with government, corporations, and individuals.

New concepts education is essential for a single corporation's own survival, strategy, and growth. In addition to entry-level skills and changing technology skills, new concepts provide for the anticipated needs of a corporation (Lusterman, 1977:7). Corporate strategic planning has resulted as a management concept at the end of the twentieth century. Drucker, quoted by Gold (1981:107), stated, "In turbulent times, an enterprise has to be managed both to withstand sudden blows and to avail itself to unexpected opportunities." Corporate strategic planning becomes a tightrope (Lusterman, 1977:7). Lusterman continues to describe the tightrope. An ideal program is to anticipate needs and at the same time not bring too many people along the way [in corporate training for career advancement] to avoid breeding frustration and discontent.

The corporate educational system is investing in the development of the human resources capital. It is projected ("Education? By Computer, Naturally," 1983:A5) that in the next fifty years business and industry will become more involved in education and job training. The corporate classroom will continue to justify training costs to receive the benefits of insuring occupational vitality, stabilizing the individual corporation's employment, enhancing the individual corporation's quality of work life, and reflecting a commitment to training from top management (Lusterman, 1977:6).

Educational Specifics

The corporate education system has unique characteristics when contrasted to the traditional educational system. Participants are usually highly motivated to learn. The workplace is the setting for both the learning and the application of the learning. The goals of the corporations that sponsor the education relate to the impact the education will have on the business' "profit, growth, and viability" (Lusterman, 1977:65). The goals of the corporation impact on the specifications of the educational offerings. Corporate education is usually mission oriented (Lusterman, 1977:11) but characteristically is shorter in length than traditional education. This is a result of teaching a specific piece of knowledge that is relevant to a particular task or an immediate need of the corporation (Gold, 1981:68-69) rather than history and/or theory.

Eurich (1985:59) identified five areas of training that corporations most often provide. The areas are (1) management and executive training, (2) technical and scientific study, (3) sales, (4) service and customer training, and (5) general education. Corporations currently meet the training needs using a variety of teachers. Gold (1981:39-40) surveyed 113 organizations to determine the teacher source of the education. Sixty-five percent of the surveyed corporations had 1000 or more employees, while 35 percent had under 1000 employees. A large percentage of the corporate on-site training was done by corporate staff. Full-time company instructors were used in 37 percent of the corporations. Personnel department employees were

used on a part-time basis by 50 percent of the corporations. Other corporate personnel (supervisors, foremen, staff) were used by 80 percent of the corporations. Twenty-four percent of the corporations used outside vendors or suppliers. The training of exempt employees included using vocational, technical, and business schools (9 percent); universities and colleges (27 percent); and private training specialists and consultants (48 percent).

Employers often develop their own training programs to control the content and the time allowed for training. Lynton (1984:87) stated that educational faculties are accused of being arrogant and insensitive to the corporation's needs. Lusterman (1977:7) cites common pitfalls of education's programs as courses that teach history rather than skill, inappropriate or limited application, and content that is taken from educational programs and "sold" to corporations. Corporations support or accept education and training that results from an analysis of needs that are relevant to the corporation's goals and that provide continued evaluative feedback. Lynton (1984:87) identifies a need for educators to "abandon their traditional way of designing educational programs in splendid isolation, with little or no input from anyone outside the academy."

Florida's Pensacola Junior College was cited by Kramer and Saxton (1983:43) as an educational facility that adapted programs directly to industry's needs. Courses were adjusted to match the subject matter with the employees' job assignments. A mutually productive relationship became a by-product. Pratzner (1983:14), however,

presents a concern that customized training is so firm specific and equipment specific that the training is concerned with only the needs of jobs and employees that it is taught only once. Company specific training may proliferate self-imposed limitations, cautioned Eurich (1985:83). Courses taught by outside vendors broaden the viewpoints and keep the classroom open to new technology. Pratzner (1983:14) feels more attention should be given to the needs of the students than currently is given. Gold (1981:110) also emphasized that additional attention be given to human resources. Gold stated that "only as human resources gain stature . . . equivalent to technology" will the health of individual corporations and the nation as a whole be at their best.

The needs of the adult learner are identified by Morse (1984:1) as an educational specific of corporate training. Morse stated that "university-sponsored educational programs have developed effective methods of teaching and learning" that would benefit traditional educators. Lynton (1984:109) concurred, stating that corporate trainers must be sensitive to the needs and capacity of the adult learner. Lynton (1984:70) indicated the "academy must face up to the need for a number of profound changes." Changes, Lynton stressed, included a change in procedures and methodologies, a change to an androgogical instead of a pedagogical approach, and a change in the academy's relationship to the nonacademic world. The instructor would become a "facilitator and catalyst for learning rather than the sole source of excathedra enlightenment" (Lynton, 1984:109).

Corporate instruction differs from traditional education in strategy (Gold, 1981:65). Educational institutions can never assume full responsibility for corporate training. Likewise, corporations cannot assume the responibility for the broad general education of adults. Groff (November, 1984:44) projected:

> In the years ahead, no issue will be more important than the development of the intellectual capital and the implementation of planning and management systems that forge a tighter relationship between education and the economy.

Implications for Educational Institutions

Role in Economic Development

The "philosophy and history of public vocational education" (Pratzner, 1983:14) has been occupation specific. Since the passage of the 1917 Smith-Hughes Act, educational institutions have concentrated on preparing individuals for entry-level occupations. Burger (1984:39) wrote that community colleges can no longer train for a specific job because currently there are not enough jobs for all. However, community colleges must assist in creating and retaining jobs. Burger (1984:39) continued stating that economic development was not the sole responsibility of the community college, but economic development could not be without the community college.

Participation in the states' and nation's economic development appears to be a logical role (Liston, 1984:23) for community colleges and vocational, technical, and adult education institutions. Both serve the community and the people. Pratzner (1983:14) suggested an even tighter bond than Liston described. Pratzner suggested education

was a servant to industry based on the fact that public education and tax monies are used to support business and industry specific training in the name of economic development.

Richard Hey (1978:17), as guest speaker at the Changing Work Force Needs With Implications for Higher Education conference, proposed that education take on the role of unifier. Hey continued that knowledge is education's business. Business is vital for today's business and industry, and today's business and industry are vital to the states' and nation's economic future. Gold (1981:76) concurred, indicating that the relationship between work and education, ignored in the 1960s, must be systematically developed. As the relationship is developed, education will outline its place in and value to in the nation's future. Burger (1984:39) projected that in addition to working with business and industry, educational institutions need to develop close relationships with local government and economic development organizations. The 1980 Assembly on Industry-Education Cooperation discussed the relationships (Gold, 1981:43). The assembly "endorsed the investment approach, which in essence holds that continuing education and training of a labor force . . . is an absolutely necessary investment for the future."

"The single most important ingredient to the successful involvement of community colleges in economic development is commitment" (Burger, 1984:39). Burger continued to emphasize commitment. Commitment was necessary from the governor's office on a state level; the state board of community and vocational, technical, and adult

education boards; as well as commitment from within the educational institutions. Warmbrod (1983:19) identified "visible commitment of top college administrators" as the key in fostering commitment throughout the institution.

Benjamin Tregoe (quoted in Gold, 1983:38) is an authority on corporate strategic planning. Dr. Tregoe "contends that human resource development" will be a key function in every organization for the next twenty years. If educational institutions make commitments to providing a portion of the human resource development, what will be the return for the educational institutions?

Lynton (1984:69) stated that economic development activities reduce academic isolation. Instructors and administrators leave the academic setting and enter the corporations' environment. Awareness and sensitivity to the needs of the workplace and the work force take place. Educational institutions can profit from businesses' and industries' (1) political power, (2) economic resources, and (3) access to adult learners (Gold, 1981:23). Lusterman (1977:3) concurred that financial support is realized. In addition, Lusterman documented that business and industry also provide input for curriculum development, planning assistance, as well as a market for adult education.

Enrollment and tuition dollars may be the greatest benefits as a result of collaboration between higher education and business and industry (Gold, 1981:30). The decline in posthigh-aged students identified in Chapter 1, page 15, can be supplanted by the employed

individual needing retraining. The employed individual becomes the new student.

The New Student

Eurich (1985:21) predicts that traditional and higher education enrollment will continue to decline until 1995. Lewis and Fraser (1984:28) concur:

> The major demographic trend influencing vocational education for the most of the rest of this century is the decline in the number of secondary students. Almost all of the young people who will be in high school before the year 2000 have already been born, and all projections point to a steady decline through the early 1990s. Historically, most vocational students have been at the secondary level. In the 1980s, the number of secondary vocational students is expected to decline as the total secondary school population declines.

Shrinking posthigh school enrollments reduce educational budgets previously financed by tuition. At the same time, financing from federal and state sources are decreasing. Some institutions are facing uncertain futures (Morse, 1984:1).

An estimated $400 million was spent by corporations in 1975 for programs, courses, and seminars outside the corporate facility (Lusterman, 1977:2). The power received from positive collaboration with business and industry and the potential training needed by corporations is often overlooked by traditional education (Eurich, 1985:2). Lynton (1984:64) accuses educational institutions of continually being driven by internal values and priorities. "They [educational institutions] act as if they were primarily institutions to teach the young." Eurich (1985:20) states that adult education is the only part of the American education world that is growing. Gold (1981:76) claimed

higher education was at a level of crisis based solely on the demographics of the student population . . . the older, adult student.

The employed adults returning for retraining provided a potentially new and large student group. Barton (1983:24) challenged educational institutions to question if a commitment has been made to adult education. Businesses' and industries' needs, the adults' needs, the hours of scheduling classes, and teaching methods are issues to be addressed in preparing for the new student. Preparation for the new student is dependent upon the institution's commitment to adult education.

Warmbrod (1983:19) listed ten critical elements needed for improving two-year college retraining programs. Three of the elements discussed commitment.

> Strong leadership on the part of the college president is essential in mobilizing the college to serve industry and to aid in local and state economic development.
>
> The visible commitment of other top college administrators is a key in fostering commitment throughout the college.
>
> An explicit statement in the college's mission statement or the institutional goals of the president should commit the college to provide special training.

Commitment to economic development and the new student is a commitment to adult education. Lynton (1984:73) believes adult education is currently carried out by "institutional elements that are peripheral and have relatively low standing." At the same time, most posthigh institutions are involved in various kinds of public service, including outreach, technical assistance (Lynton, 1984:63), and training.

In addition to leadership commitment, the staff must accept the new student and be prepared to teach the new student. Lynton (1984:63) suggests that outreach activities have been "ignored or even denigrated by most of the faculty." Lynton proposes that colleges define what they teach and adapt policies and procedures to serve all potential clientele. Lynton (1984:74) further advised wiping out the dividing line between "regular" and "continuing education." This allows for a lifelong learning system (Bass writing the editorial for Gold, 1984:i) for the student and a continued mission and role for the educational institution.

Because of the new student population, higher education must adapt to the needs of the new student. Corporations are a current and future user of the educational institution product. Gold (1981:44) projects that the opportunities to build new markets will grow if the educational world studies the employers' needs. The educational institution must be flexible, responsive, practical, and concrete in delivering readily available training (Lynton, 1984:68). Instructors must be competent and know how to deliver quality training to adults (Warmbrod, 1983:19).

Gold (1981:20) cited the returning student as only one of the many benefits derived from corporations' and education's relationship. That relationship can result in new faculty sources, basis for interdisciplinary studies, new criteria for assessing learner performance, and new academic standards. In addition, faculty experience involvement with outside agencies and identifying potential

posthigh student involvement with the corporation. Employers can be taught how to use "work as a learning experience" (Gold, 1981:74).

Responding to Business' and Industry's Educational Specifics

Corporate education is challenging the educational institution "to clarify and reaffirm its mission" (Eurich, 1985:xiv, quoting Boyer). Lynton (1984:63) concurs. Lynton asks that educational institutions define what they teach and follow through with policies and procedures to support the decision. When educational institutions provide training to corporations, establishing business' and industry's needs, the adaptability of the educational institution, faculty considerations, and evaluation are four specific areas that must be addressed.

A critical issue is the need to clearly define the educational need and appropriate course content (Gold, 1981:67 and Lynton, 1984:87). Educational staff must be willing to work with the corporate staff. This requires education to clearly communicating with business and industry as to the exact content to be offered (Warmbrod, 1983:19). It requires that staff have the basic skills (Gold, 1981:42) and knowledge to discuss corporate needs. It requires the ability to discriminatorily identify specific skills needed by the employed individual (Lusterman, 1977:29). The matching of needs with course content is what Lusterman (1977:7) labels tailored training. Customized training is often used as a synonym for tailored training.

Gold (1981:107) feels that many collaborative efforts between education and business and industry did not come about because of

conscious planning on education's part but rather as a response to individual situations and opportunities. Gold (1981:67) continued to censure educational institutions. An increase in education's responsiveness to business and industry needs and a "middle ground between the traditional lengthy process and some 'rubber stamps'" are two of Gold's suggestions for improvement.

Businesses and industries request adaptability from educational providers. Identification of specific needs customarily means some flexibility in course content. Training is apt to be determined by a specific educational need (Eurich, 1985:xiii) of the business or industry. This is in contrast to a "lock-step of two semesters." Gold (1981:68) requests flexibility in providing "a variety of instructional tasks" in periods of time that are shorter than a full course or whole semester. The educational provider cannot take content from the posthigh curriculum to business and industry without adaptation to business' and industry's needs.

Adaptability of time and place may also be required (Gold, 1981:60). If business and industry are purchasing training, it is likely that the request will be for the training to be on the corporation's time and in the corporation's physical plant (Hey, 1978:16). Shift times may also determine class times. Eurich (1985:53) described corporate training as "anytime for any necessary length of time" determined by the purpose.

Eurich (1985:53) writes that the learning style of each person be considered. Lusterman (1977:67) suggests that corporate training be

"active, participatory learning keyed to the individual." Gold (quoting Lyton, 1984:5) states that individual learning is typical of higher education; while corporate training has emphasis on "tasks, interpersonal relationships, and team work."

"Technically competent instructors who know how to teach adults effectively are necessary for quality training" (Warmbrod, 1983:19). Corporate instructors need to be androgically oriented. Corporations have criticized educational institutions for their pedagogical views (Gold, 1981:67). Gold further reproved. "Most faculty members simply do not know how to teach adults, especially those who return to the classroom with a great deal of prior experience." Gold (quoting Cross, 1981:67) described the challenge of teaching experienced adult people. As students, the adult reacts to the content and format of the course. The adult must be taken seriously as evaluators of the educational experience.

Both Lynton (1984:72) and Gold (1981:75) discuss the importance of faculty involvement with business and industry contacts. Early involvement with business and industry, plus top level leadership making the business and industry-sponsored education "central to the mission" (Gold, 1981:75), ensure that faculty will take "nontraditional teaching, such as employer-sponsored education, seriously." Gold also advocated that off-campus projects receive equal attention in labor contracts. Participation in educational offerings to business and industry need to receive the same consideration as on-campus posthigh

instruction. Union contracts sometimes prohibit instructors being assigned to courses that cannot be taught outside the normal work hours.

The educational institutions must be able to deliver quality instruction. Frequently, faculty become obsolete because of new techniques and new developments, and new equipment is brought into industry (Eurich, 1985:16). Faculty must be kept up to date. In addition, corporate instructors need to balance the teaching more on the side of practical, real, and results oriented and less on the theory (Lusterman, 1977:67).

Continual evaluation is recommended by Gold (1981:93 and Warmbrod, 1983:19). Evaluation is a feedback that gauges the quality of instruction. Written student response, instructor interview, and inspection of methods of delivery are important in the evaluation (Gold, 1983:83).

Current Business, Industry, and Education Partnership Models

The literature review indicated many state governments are involved in economic development. Economic development often results in training or retraining needs of businesses and industries. Gold (1981:10) accuses educational institutions, suffering from declining resources, of turning to business and industry for "sympathy, political allies, new resources, and new enrollments." Gold continues to state that colleges have become involved in economic development "without thinking through the consequences."

Many educational institutions' economic development programs were described in research and conference reports. However, the economic development partnerships between business, industry, and education appear to be so new that recognition has not reached a national level. Few economic development partnerships were described in literary works.

Burger (1984:36) described Illinois' community college programs. Three purposes have been defined. They are the (1) coordinating customized training programs designed to meet business' specific needs, (2) providing training assistance through workshops and seminars, and (3) providing direct consultation on various topics.

Pensacola Junior College [Florida] (Kramer and Saxton, 1983:43) works closely with business and industry to develop inexpensive, high-quality technical training programs. Liston (1984:23) described the programs provided by Rhode Island Community College. The college regarded customized courses to meet the specific needs of business and industry to be the primary function of the program. State of the art procedures are taught. High technology equipment is made available for business' and industry's trial and error. Emphasis is also placed on creating opportunities for nontraditional students to enter technical fields.

"Real opportunities exist for traditional education to work with corporations, government, and labor unions to educate the work force; but structures and attitudes must change on both sides" (Morse, 1984:1). Morse continued to identify needed changes. Education must

realize it is not the only educator. Businesses and industries must realize some procedures and rules are necessary for maintaining high quality. Both have to realize that teaching adults varies from teaching traditional students. Both have to communicate and be willing to look at the other's point of view. Morse states everyone must be a full partner with equal responsibility and authority.

•Cross (quoted by Gold, 1981:67) identifies learning to be a good partner to business and industry as the current issue of higher education. Such a partnership must rely on mutual trust and respect. Cross cautions that neither education nor business and industry can be a junior partner.

The educational training of business and industry and the traditional education system were developed in parallelism (Eurich, 1985:45). Eurich ascertains the two have never been synchronized. Traditional education has always lagged behind in meeting business and industry needs. Because no linkage has been "effective on any large scale . . . today private industry is taking the role of mentor and educator."

Recommendations for the Future

The challenge is to have a synergistic and positive relationship between education and corporations. Craig (forward to Lynton, 1984:ix) states that the competition over turf between educators and employers cannot be tolerated. Craig substantiates his statement based on the large need for training. A trained work force and the availability of continued training are two main reasons

businesses relocate (Burger, 1984:36) according to the Fantus Corporation. Therefore, if economic development is to be vital to the local, state, and national economy, planning is a requirement.

Business and Industry Educational Councils

The formation of business and industry educational councils is a recommendation of Gold (1981:41). Gold outlined five necessary elements. They included (1) both sides must be convinced that they can solve real problems and fill real needs, (2) specific problems must be addressed ("simply having meetings will not work"), (3) someone, on either side, must reach out to the other side, (4) there must be a productive working phase in process, and (5) the effort must be reviewed and evaluated for results. Clarke (1983:70) supports the recommendation to meet face to face. Clarke states that meetings are essential to discuss the existing different views and different capabilities between business and industry and education. Little research has been done on the "interinstitutional linkages" betweeen higher education and business (Gold, 1981:110). Pratzner (1983:14) predicts many frustrations because of the problems having impact on business and education such as "high unemployment, dislocated workers, criticism of much of public education, and trying to keep programs up to date with shrinking resources." Conferring between business and industry and education would also assist in identification of curriculum contents (Russell, 1982:34).

Joseph Borgan and William Shade's (Martorana and Piland, 1984:46) chapter entitled "Joining Others for Community Economic

Development" discussed the motivation for community people to become involved in a council. The five strongest motivators listed were:

1. Regain lost manufacturing employment and other primary jobs.

2. Spread the tax base for existing industries, farmers, businesses, and property owners.

3. Broaden the economic diversity of the area.

4. Provide employment opportunities.

5. Avoid depending on the chance that the economy will improve.

Borgan and Shade (Martorana and Piland, 1984:48) suggest the technical schools or community colleges participate as an economic development team advocate. As a participant to the council, the community college representative can inform corporations as to the availability of the skilled work force, employer specific training, and assistance available when applying for state and federal grants.

Human Resource Councils

The development of human capital is the purpose of corporate training and retraining. The term "human resource" was proposed by several. Lynton (1984:147) proposed statewide human resource councils. The state human resource councils would be an information system to address future training needs; analyze state and local policies making appropriate recommendations; and would include "influential chief executives from education, business, labor, and government."

A community-based human resources management center was proposed by Gold (1981:6-7). The community-based council would "monitor and manage economic factors causing structural and cyclical imbalances in local labor markets." Gold clarified that community councils could operate only if advocacy and funding were realized from national corporation, union, government, and education leaders. Gold described the council as the true "wealth of the nations" outlined in Haribison's work.

Within the corporate confines, Gold (1981:97) proposes a separate human resource development department. Gold contrasts the human resource development department with personnel. Each functions in its own right with separate purposes.

The Partnership

> The conviction that a role by these [educational] institutions in the development and maintenance of occupational effectiveness is much more than a matter of academic self-interest. The situation is not only dangerous for higher education, it is also less than optional for employers and employees (Lynton's Forward by Craig, 1984:xii|

Cooperation, partnership, and collaboration appear necessary for future survival. The New Work Life Changes (Benson, 1986:no page) plan developed by the 1986 Saturn plant contains an element that "business and education will be 'close-close'--a 'win-win' situation." Continual and open dialogue "with a two-way flow of ideas and criticism" (Lynton, 1984:xii) are needed. Lynton (1984:89) also identifies sensitivity and willingness to be flexible as required elements for a productive council.

Gold (1981:20) suggests the partnership between business and industry and education serve four functions. The functions include the determination of production and distribution of teaching and learning services and production and distribution of new ideas and products. A third function is the flow of human resources between education and employment. A fourth function is the process of strategy development for higher education and business relationships.

Terre Haute, Indiana, an early frontier post and early industrial city, had experienced declines in population, industry, employment, and image by 1980. Borgan and Shade (Martorana and Piland, 1984:48-57) describe a partnership between business, industry, chamber of commerce, government, and education formed for the purpose of stabilizing the labor force and accommodating economic growth. Success for the project was attributed to the organizations and institutions willing to collaborate and work together for the common good.

CHAPTER 3

Procedures and Methodology

Design of the Study

Economic development and training was introduced in the VTAE system in 1978. Administrative staff attending state meetings with the state VTAE staff were the first to receive economic development and training information, current and future implications, and impacts for the local VTAE districts. The second staff level to become involved with economic development and training were the coordinators of economic development and training (formerly BAIL--see Chapter 1, page 7). Noncertified management, instructors, and support staff did not receive information or exposure to economic development and training philosophy, activities, and/or significance of economic development and training to the VTAE system.

The purpose of the study was to analyze the knowledge and attitude of LTI staff as it related to economic development and training. A three-part design was used for the research study. Part one of the design was to establish current knowledge and attitude of all full-time LTI staff members at the beginning of the 1985-86 school year. A review of literature and a state of the art investigation of Wisconsin VTAE districts identified that a specific instrument to measure staff knowledge and attitude toward economic development and training had not been developed. It was necessary to develop an instrument for use at

LTI. The pretest findings recorded knowledge of and attitude toward economic development and training of the five staff areas as of August 1985. The staff areas included administration, VTAE certified managers, noncertified managers, instructional staff, and support staff. Each area of staff impacted the economic development and training mission of LTI.

Part two in the design used limited in-service activities for the administrators, VTAE certified management, and the noncertified managers. The administrative staff recognized the need for information dissemination and gave support for the development of in-service activities including finances, time, and personnel. The vision of total institutional commitment to economic development and training would be articulated and communicated to the three staff groups through the limited in-service training activities.

Part three of the design was the readministering of the instrument as a posttest. The posttest findings were used as an evaluation to determine the change in the knowledge of and attitude toward economic development and training after in-service training activities. The comparison of knowledge and attitude pretest and posttest findings by the five staff areas is recorded in Chapter Four.

Development of the Instrument

The first draft of the instrument was designed to record the knowledge and attitude of LTI staff regarding economic development and training. Statements were developed from interviews with economic development and training coordinators, administrators of economic

development and training, and written faculty communiques regarding personal concerns and comments on LTI's economic development and training activities. Statements were modified using two literary documents. Ladwig's (1983) doctoral study had addressed change created by the implementation of a new management tool and was helpful in the assigning of numerical responses. The American Association of School Administrators (1981) had addressed attitudes toward women as school administrators. The summary of the report was beneficial in establishing a consistent numerical base for the responses. A total of twenty-two statements were originally developed as part one of the instrument.

Part two of the instrument was an identical listing of the LTI board's strategic plan for the 1985-86 school year. Several of the items included in the strategic plan had impact on economic development and training for the LTI district. Part two of the instrument established the staff's knowledge or lack of knowledge of the board's strategic plan.

Directions for completing the instrument and a coding system for accounting purposes were written. A segment of the instructions asked each individual to identify the length of time each was employed by LTI. Under one year, one year to five years, and over five years were the categories. The data collected were able to be categorized by staff group and length of employment.

Validity

The draft instrument was validated by an expert review committee (Appendix A) selected for each individual's expertise. National member George Mehallis is executive director of Broward Community College. Broward Community College is a national leader in economic development and training. Mehallis is a member of the president's advisory council on vocational, technical, and adult education. He is a national seminar lecturer for Nova University. He lectures for the Emergence of Vocational, Technical, and Occupational Education and Personnel Seminars.

State committee member Merle Bodine is director of the Bureau of Economic and Community Development and Training for WBVTAE. He serves as a liaison to the state of Wisconsin's Department of Development and Forward Wisconsin. He is part of the history of the economic development and training in the VTAE system in the state of Wisconsin.

Area committee member Jerry Stepien is in management at another Wisconsin VTAE district. His recent doctoral research and his expertise in grammar were valuable in the validation of the instrument.

Local committee member Kay Fett is employed in a district business. She was formerly employed as a BAIL coordinator and later as an economic development and training coordinator. Her review of the instrument from a business perspective was important.

Local school member Patrick Lacey is associate administrator of adult and continuing education. The LTI economic development and training coordinators are under his leadership. Lacey is the

administrator of all economic development and training activities for the LTI district. His validation review was valuable from LTI's internal perspective.

The five members of the team were asked to participate (Appendix B), and all accepted the task. The draft instrument was sent to them with a definition of validity (Appendix C). Grammatical changes, rewording, and additional issues were received and reviewed. Minor changes were made. The decision to accept or reject new instrument items was based on whether or not the new item addressed the attitude and knowledge of LTI's economic development and training activities. One new statement was added to the instrument. A second draft of the instrument was printed.

Reliability

The instrument was to be used as a pretest and posttest and administered to five staff levels at LTI. Therefore, a reliability committee was selected to represent the five staff levels. Two individuals from each staff level were asked (Appendix D) to complete the instrument for the purpose of verification, consistency, and reliability. The original ten asked (Appendix E) accepted the task.

A test-retest reliability study was conducted. The ten staff members responded to the items during the normal workday. It was assumed that administering the instrument at the normal workplace created the least amount of physiological variance. The reliability study was done to identify inconsistencies of the instrument. The reliability study did not attempt to control physical disturbances of

the individual responding to the instrument. Any reading errors by the participants may have lowered the test-retest correlation results.

The test-retest responses were inputted into an LTI computer having a Statistical Package for the Social Sciences (SPSSX). A correlation coefficient was computed on each item (Table 1). The critical value was determined using Hardyck and Petrinovich's (1969:276) table of critical values of the correlation coefficients (Appendix F). A .05 level of significance was established. Ten individuals participated in the reliability study. One degree of freedom was allowed. Critical value was .602. Each item's standard alpha coefficient exceeded the .602 critical value.

Table 1 reports the correlation coefficient of each item. Fourteen of the twenty-three correlation coefficients were .90 or above. Five items had correlation coefficients between .8367 and .8999. Three items had correlation coefficients of .7750 to .7999. One item had a correlation coefficient of .6154. Minor changes were made in the wording. All items were accepted as statements for the final draft of the instrument.

Instrument Description

The final draft (Appendix G) of the instrument consisted of twenty-three statements requiring each staff to indicate the knowledge of and attitude toward economic development and training. Each item had five possible responses. Each response was assigned a value. Great disagreement was assigned a value of one, disagreement was

Table 1

Item Reliability Coefficients

Item	Standard Alpha Coefficient
1	.7826
2	.9444
3	.8541
4	.7779
5	.9739
6	.9557
7	.8491
8	.9596
9	.9100
10	.8515
11	.9333
12	.9444
13	.8367
14	.6154
15	.9166
16	.9639
17	.9062
18	.9000
19	.9706
20	.9468

Table 1 (continued)

Item	Standard Alpha Coefficient
21	.9702
22	.8750
23	.7750

Critical Value--.602

(Hardyck and Petrinovich, 1969:276)

assigned a value of two, some agreement was assigned a value of three, agreement was assigned a value of four, and great agreement was assigned a value of five.

A response of one (great disagreement) was interpreted as low knowledge base or negative attitude. A response of two was defined as disagreeing with the concept. A response of three (sometimes agree) was defined as middle-of-the-road or fifty-fifty agree-disagree. A response of four was defined as agree (a higher level of knowledge than one, two, or three). It also indicated an attitude that was positive toward economic development and training. A response of five (great agreement) was defined as common knowledge and a positive attitude toward economic development and training mission and activities.

The instrument items represented categories of knowledge and attitude. Nine items addressed the knowledge of LTI's economic development and training mission and goals. Items two, three, six,

twelve, thirteen, fifteen, eighteen, twenty, and twenty-one were statements regarding the mission and goals of LTI. The knowledge of the economic development and training coordinators' job description and responsibilities were identified in items four and seventeen. The knowledge of the instructors' role in economic development and training were stated in items seven, ten, and eleven.

Communication of economic development and training and the views on instructor's pay and work load were hypothesized to be contributing factors in staff attitude. Items one, fourteen, sixteen, nineteen, twenty-two, and twenty-three were statements addressing communications. Items five, eight, and nine addressed the attitude of staff regarding instructors' compensation when working in an economic development and training activity.

Part two of the instrument was a reprint of the LTI board's 1985-86 strategic plan. Four of the ten strategic plan items related to economic development and training. It was hypothesized that only select LTI staff knew the ten strategic plan items. The board had written the strategic plan with mission statements to receive primary emphasis [high], special emphasis [medium], and emphasis [low]. Each staff member was asked to indicate which items should receive high, medium, or low emphasis. Responses were recorded by circling H (high), M (medium), or L (low). Part two was included to compare the staff's preknowledge and postknowledge of the administration and board's commitment to economic development and training. The board's strategic plan was a vital ingredient in the in-service activities.

Population

The population for the study was the entire full-time staff of Lakeshore Technical Institute. The staff is classified by five categories. Administrative staff numbered six individuals. The VTAE certified management staff are midmanagers who report to administration. VTAE certified management staff are responsible for the supervision and coordination of educational programming. Seventeen staff members were in the VTAE certified category. The noncertified management staff were twenty-one individuals who are responsible for the supervision and coordination of the support services needed to facilitate the educational programming. The instructional staff included all teachers teaching full time and under negotiated contract. The study excluded all part-time instructors. One hundred and five instructors were in the study. Support staff included seventy-one individuals employed to provide the clerical and custodial detail necessary to provide education to the district's residents/students.

The pretest data were collected from the 220 individuals. The posttest data were collected from each staff member still employed who had completed the pretest. Individuals hired between the administration of the pretest and posttest were not included in the study.

Data Collection

In spring of 1985, the LTI administration granted approval to the study's title, statement of the problem, and purpose. Approval included the financial cost of the study, in-service activities, and employee time used in the gathering of data. Written proof of the

approval was in memo form (Appendix H) from the administrator of instructional services. The memo requested participation from each staff member.

The pretest was administered between August 12, 1985, and September 12, 1985. The instrument was coded using a different color paper for each staff category. Telephone and written reminders were used to achieve 100 percent participation for the pretest in all staff groups. Raw data were transferred into an LTI computer having a SPSSX program. Directions were written, using the SPSSX program, to facilitate the analysis and output of data congruent to the research design.

The posttest was administered between May 12, 1986, and June 6, 1986. Again, the instrument was coded using a different color paper for each staff category. Telephone and written reminders were used to attempt to achieve 100 percent participation. An 100 percent return rate was achieved in administration and VTAE certified management. A 90 percent return rate was achieved in the noncertified management group. A 79 percent return rate was achieved in the instructional staff group, and a 73 percent return rate was achieved in the support staff group. The posttest cumulative return rate was 80 percent. Discussion as to reasons individual staff members did not complete the posttest is included in Chapter 5 (page 117). Raw data were transferred into an LTI computer having a SPSSX program. Data were produced using the pretest SPSSX data processing program.

Statistical Design

The following research questions to determine staff knowledge of and attitude toward economic development and training were stated:

1. Was there a difference in the knowledge of economic development and training between administrative, VTAE certified management, noncertified management, instructional, and support staff?

2. Was there a difference in the attitude toward economic development and training between administrative, VTAE certified management, noncertified management, instructional, and support staff?

3. Was there a difference in the knowledge of economic development and training when comparing the pretest and posttest data from the three staff groups receiving limited economic development and training in-service activities and the two staff groups receiving no economic development and training in-service activities?

4. Was there a difference in the attitude toward economic development and training when comparing the pretest and posttest data from the three staff groups receiving limited economic development and training in-service activities and the two staff groups receiving no economic development and training in-service activities?

5. Was there a difference in the knowledge based on the length of staff employment at LTI?

6. Was there a difference in the attitude based on the length of staff employment at LTI?

7. Was there a difference in the knowledge of the LTI board's strategic plan statement and emphasis between administrative, VTAE certified management, noncertified management, instructional staff, and support staff?

This study was an assessment of the entire LTI staff regarding economic development and training. Krause (1985:24) stated, "An indepth organization assessment is often a first step in evaluating the changes that may be necessary." The study was designed for the purpose of facilitating changes in the knowledge of and the attitude toward economic development and training. The pretest findings were discussed with LTI administration. Limited in-service training activities prepared for the administration, VTAE certified management, and non-certified management staff were based on the established needs. Krause (1985:24) continued by saying "vision . . . is the force that provides focus and direction . . . the prospect of what a company [educational institution] can or should become." Vision is an idealistic view of an educational institution's future. Few LTI staff had the vision of the future of economic development and training activities. However, as Krause stated, the vision must be articulated and communicated throughout to all employees. It was hypothesized that the economic development and training mission had not been clearly articulated nor communicated to all staff. The study provided in-service activities to three staff groups for the purpose of articulation and communication of economic development and training activities.

Null Hypotheses

1. There will be no difference in the knowledge of economic development and training between administrative, VTAE certified management, noncertified management, instructional staff, and support staff.

2. There will be no difference in the attitude toward economic development and training betweem administrative, VTAE certified management, noncertified management, instructional staff, and support staff.

3. There will be no difference in the knowledge of economic development and training between the three staff groups receiving in-service training activities and the two groups receiving no formal in-service training activities.

4. There will be no difference in the attitude towards economic development and training between the three staff groups receiving in-service training activities and the two groups receiving no formal in-service training.

5. There will be no difference in the awareness of the LTI board's ten strategic plan statements amd emphasis between the administrative, VTAE certified management, noncertified management, instructional staff, and support staff.

The results of the awareness of the strategic plan were presented in nominal format. The pretest responses were compared to the LTI board's level of emphasis. The change in awareness was recorded by posttest responses.

Alternate Hypotheses

1. There will be a difference in the knowledge of economic development and training between administrative, VTAE certified management, noncertified management, instructional, and support staff.

2. There will be a difference in the attitude toward economic development and training betweem administrative, VTAE certified management, noncertified management, instructional, and support staff.

3. There will be a difference in the knowledge of economic development and training between the three staff groups receiving in-service training activities and the two groups receiving no formal in-service training activities.

4. There will be a difference in the attitude towards economic development and training between the three staff groups receiving in-service training activities and the two groups receiving no formal in-service training.

5. There will be a difference in the awareness of the LTI board's ten strategic plan statements and emphasis between the administrative, VTAE certified management, noncertified management, instructional, and support staff.

Summary

Lakeshore Technical Institute's (LTI) staff had a difference of attitude and knowledge regarding economic development and training. The knowledge base and attitude of the staff was recorded using a pretest instrument. The instrument was specifically designed for LTI. A 100 percent response was realized.

Limited in-service activities were planned for LTI's administration and management personnel. In-service activities were coordinated to increase the knowledge of economic development and training and improve the attitude that staff members held toward economic development and training. In-service activities were arranged to articulate and communicate LTI's future with regard to economic development and training activities.

A posttest was administered to all staff. Pretest and posttest data were recorded in table form. The tables and the results of the study are described in Chapter 4.

CHAPTER 4

Presentation of Results

The purpose of this research was to analyze the knowledge of and the attitude toward economic development and training at Lakeshore Technical Institute for the period of the 1985-1986 school year. The review of literature, the [illegible] board's strategic plan, and LTI's administrative plan emphasized the need for increased educational relationships between business and industry and the educational vendors. However, implementation of economic development and training activities with business and industry were being thwarted by LTI staff who did not accept or were unaware of the institution's plan. This research was planned and conducted as an in-depth organizational assessment. The profile of staff's knowledge and attitude of economic development and training was used to assist in making the interpretations, conclusions, and recommendations.

Target Population

Two hundred and twenty full-time staff began the 1985-86 school year. All were included in the research. One hundred percent participation was achieved for the pretest. Results were recorded by the five staff groups. The staff groups were administrative staff (n = 6), VTAE certified management staff (n = 17), noncertified management staff (n = 21), instructional staff (n = 105), and support staff (n = 71).

Each staff group was further described by the length of employment at LTI. Sixteen of the two hundred and twenty staff members (7.2 percent) had been employed less than one year. Thirty-nine of the two hundred and twenty staff members (17.8 percent) had been employed at least one year but less than five years. One hundred and sixty-five of the two hundred and twenty staff members (75 percent) had been employed over five years.

The posttest included 214 full-time staff. A cumulative return of 80 percent was achieved. A 100 percent return rate was achieved from administrative and VTAE certified staff. A 90 percent return rate was achieved in the noncertified management staff group. A 79 percent return rate was achieved in the instructional staff group, and a 73 percent return rate was achieved in the support staff group. Individuals were reported in the same length of employment on the posttest as reported in the pretest.

Analysis of the Knowledge of Economic Development and Training

Fourteen statements in the instrument (Appendix F) were designed to document staff knowledge of economic development and training. Statements 2, 3, 4, 6, 7, 10, 11, 12, 13, 15, 17, 18, 20, and 21 requested that staff indicate the knowledge level of a variety of economic development and training aspects. The five possible responses were 5 = great agreement, 4 = agreement, 3 = some agreement, 2 = disagreement, and 1 = great disagreement. The raw data were transferred into an LTI computer having an SPSSX program. Because statement

content was individual in nature, each statement was analyzed and each related hypothesis considered. The fourteen statements addressing staff knowledge tested two null hypotheses:

> Null Hypothesis 1: There will be no difference in the knowledge of economic development and training between administrative, VTAE certified management, noncertified management, instructional staff, and support staff.
>
> Null Hypothesis 3: There will be no difference in the knowledge of economic development and training between the three staff groups receiving in-service training activities and the two groups receiving no formal in-service training activities.

Tables 2, 3, 4, 5, 6, 7, 8, 9, and 10 record the knowledge of LTI's economic development and training missions and goals. Table 2 identifies that administrative, VTAE certified management, and noncertified management staff view economic development and training as a source of new student population. The standard deviation of the post-test of the VTAE certified management staff and the noncertified management staff was small for both groups. This indicates a greater tendency towards the mean response by those two staff groups. There was a difference in the knowledge of the future student population among the staff groups. Therefore, null hypothesis 1 was rejected, and the alternate hypothesis was accepted. The three staff groups receiving limited in-service activities were in stronger agreement than the instructional and support staff groups regarding economic development and training providing new students. Therefore, null hypothesis 3 was rejected, and the alternate hypothesis was accepted.

The staff's knowledge of economic development and training as it related to the LTI board's strategic plan is recorded in Table 3.

Table 2

Comparison of Pretest and Posttest Results Obtained From Statement 2: I Feel That Economic Development and Training Will Provide LTI With a New Student Population

Group	Pretest Sample	Pretest Mean	Pretest S.D.	Posttest Sample	Posttest Mean	Posttest S.D.
Administration						
0-1 year	0	--	--	0	--	--
1-5 years	0	--	--	0	--	--
6-over	6	4.83	0.41	6	4.67	0.52
Composite	6	4.83	.41	6	4.67	.52
VTAE Certified Management						
0-1 year	1	5.00	.00	1	5.00	.00
1-5 years	2	4.00	1.41	2	5.00	.00
6-over	14	4.29	.83	14	4.29	.61
Composite	17	4.29	.85	17	4.41	.62
Noncertified Management						
0-1 year	0	--	--	0	--	--
1-5 years	2	5.00	.00	2	4.00	1.41
6-over	19	4.28	.75	17	4.18	.73
Composite	21	4.35	.75	19	4.16	.77
Instructional Staff						
0-1 year	12	4.08	.79	10	4.20	.63
1-5 years	16	4.19	.75	14	4.07	.83
6-over	77	3.73	.95	59	3.71	.89
Composite	105	3.85	.92	83	3.83	.87
Support Staff						
0-1 year	3	4.00	1.00	0	--	--
1-5 years	19	3.90	.66	13	3.69	.86
6-over	49	3.98	.85	39	3.85	.88
Composite	71	3.96	0.80	52	3.81	0.86

Table 3

Comparison of Pretest and Posttest Results Obtained From Statement 3: I Feel That Economic Development and Training Is a Planned Sequence Within the District's Strategic Planning Process

Group	Pretest Sample	Pretest Mean	Pretest S.D.	Posttest Sample	Posttest Mean	Posttest S.D.
Administration						
0-1 year	0	--	--	0	--	--
1-5 years	0	--	--	0	--	--
6-over	6	4.33	0.82	6	4.67	0.82
Composite	6	4.33	.82	6	4.67	.82
VTAE Certified Management						
0-1 year	1	2.00	.00	1	5.00	.00
1-5 years	2	4.50	.00	2	4.00	.00
6-over	14	3.93	.92	14	3.93	.92
Composite	17	3.82	.95	17	4.00	.87
Noncertified Management						
0-1 year	0	--	--	0	--	--
1-5 years	2	4.50	.71	2	4.00	.00
6-over	19	3.89	.90	17	3.88	.86
Composite	21	3.95	.89	19	3.90	.81
Instructional Staff						
0-1 year	12	3.67	.65	10	3.70	.82
1-5 years	16	3.69	1.01	14	3.33	.89
6-over	77	3.45	.78	59	3.14	1.17
Composite	105	3.52	.81	32	3.24	1.10
Support Staff						
0-1 year	3	3.33	.58	0	--	--
1-5 years	19	3.58	.69	13	3.77	.60
6-over	49	3.51	1.04	39	3.82	.87
Composite	71	3.52	0.94	52	3.80	.80

The administrative, VTAE certified management, and noncertified management staff groups more strongly agreed than did the instructional and support staff groups. The posttest recorded higher means in all staff groups except instructional staff. Null hypothesis 1 was rejected, and the alternate hypothesis was accepted. There was a difference among the three staff groups receiving limited in-service and the two staff groups receiving no in-service activity. Null hypothesis 3 was rejected, and the alternate hypothesis was accepted.

Responses to statement 6 addressed staff knowledge of economic development and training costs. Table 4 recorded the responses. A slight increase in agreement was recorded on the posttest in the administrative and VTAE certified staff groups compared to the pretest results of the two groups. The other staff groups responded with stronger disagreement on the posttests than on the pretest. Standard deviations were also smaller on the posttest than on the pretest. This indicated a greater agreement in response by the staff. Differences among staff groups were recorded, and the null hypothesis 1 was rejected. The alternate hypothesis 1 was accepted. There was also a difference recorded among the three groups receiving limited in-service activity and the two groups receiving no in-service activity. Therefore, null hypothesis 3 was rejected, and the alternate hypothesis 3 was accepted.

Statement 12 (Table 5) asked staff to agree or disagree as to whether economic development and training be delivered to business and industry by only four-year institutions of higher learning. The five

Table 4

Comparison of Pretest and Posttest Results Obtained From Statement 6: I Feel That Economic Development and Training Requests From Business, Industry, Health, and Human Services Should Be Met, at All Costs

Group	Pretest Sample	Pretest Mean	Pretest S.D.	Posttest Sample	Posttest Mean	Posttest S.D.
Administration						
0-1 year	0	--	--	0	--	--
1-5 years	0	--	--	0	--	--
6-over	6	3.00	0.89	6	3.17	1.17
Composite	6	3.00	.89	6	3.17	1.17
VTAE Certified Management						
0-1 year	1	3.00	.00	1	5.00	.00
1-5 years	2	3.50	.71	2	3.50	.71
6-over	14	2.86	1.29	14	3.00	1.41
Composite	17	2.94	1.20	17	3.18	1.38
Noncertified Management						
0-1 year	0	--	--	0	--	--
1-5 years	2	3.00	1.41	2	1.50	.71
6-over	19	3.17	.99	17	2.77	.98
Composite	21	3.15	.99	19	2.63	1.01
Instructional Staff						
0-1 year	12	3.17	1.19	10	3.50	.97
1-5 years	16	3.06	1.00	14	2.64	1.22
6-over	77	2.99	1.10	59	2.54	1.21
Composite	105	3.02	1.09	83	2.68	1.21
Support Staff						
0-1 year	3	3.00	1.00	0	--	--
1-5 years	19	3.21	.92	13	2.77	.73
6-over	49	3.12	1.27	39	2.85	1.11
Composite	71	3.14	1.16	52	2.83	1.02

Table 5

Comparison of Pretest and Posttest Results Obtained From Statement 12: I Feel That Economic Development and Training Should Be Delivered to Business and Industry Only by Four-Year Institutions of Higher Learning

Group	Pretest Sample	Pretest Mean	Pretest S.D.	Posttest Sample	Posttest Mean	Posttest S.D.
Administration						
0-1 year	0	--	--	0	--	--
1-5 years	0	--	--	0	--	--
6-over	6	1.17	0.41	6	1.17	0.41
Composite	6	1.17	.41	6	1.17	.41
VTAE Certified Management						
0-1 year	1	1.00	.00	1	1.00	.00
1-5 years	2	1.00	.00	2	1.00	.00
6-over	14	1.29	.61	14	1.43	.85
Composite	17	1.24	.56	17	1.35	.79
Noncertified Management						
0-1 year	0	--	--	0	--	--
1-5 years	2	1.00	.00	2	1.00	.00
6-over	19	1.50	1.04	17	1.41	1.01
Composite	21	1.45	1.00	19	1.42	.96
Instructional Staff						
0-1 year	12	1.83	.84	10	1.20	.42
1-5 years	16	1.44	.63	14	1.14	.36
6-over	77	1.41	.73	59	1.46	.84
Composite	105	1.46	.74	83	1.37	.74
Support Staff						
0-1 year	3	2.67	.58	0	--	--
1-5 years	19	1.95	.85	13	1.69	.75
6-over	49	1.90	1.10	39	1.69	.69
Composite	71	1.94	1.03	52	1.69	0.70

staff groups disagreed or strongly disagreed on both the pretest and the posttest. There was a difference recorded among staff groups. Therefore, null hypothesis 1 was rejected, and the alternate hypothesis 1 was accepted. The limited in-service activities included the role the VTAE system can take in serving the needs of business and industry. If in-service activities had impacted the posttest results, the recorded results would have had greater disagreement. One of the three groups receiving limited in-service activities recorded identical means on the pretest and posttest. One group recorded greater disagreement to the statement, and one group recorded a higher mean on the posttest. Therefore, null hypothesis 3 was accepted.

Staff knowledge of the economic development and training as goals stated in the strategic plan of LTI was recorded in Table 6. All staff groups were in agreement that economic development and training be top priority in the strategic plan. Only the noncertified managers' staff group posttest results differed from that observation. Null hypothesis 1 was accepted.

The administrative and VTAE certified management staff groups agreed with the statement (administration = 4.00 mean, and VTAE certified management = 4.06 mean). The noncertified management staff, instructional staff, and support staff expressed some agreement. However, the mean differed from 3.50 to 3.68 between those three groups. The results of the three staff groups receiving limited in-service activities did not significantly differ from the results of the two

Table 6

Comparison of Pretest and Posttest Results Obtained From Statement 13: I Feel That Economic Development and Training Should Be a Top Priority Item in LTI's Strategic Planning

Group	Pretest Sample	Pretest Mean	Pretest S.D.	Posttest Sample	Posttest Mean	Posttest S.D.
Administration						
0-1 year	0	--	--	0	--	--
1-5 years	0	--	--	0	--	--
6-over	6	4.50	0.55	6	4.00	0.00
Composite	6	4.50	.55	6	4.00	.00
VTAE Certified Management						
0-1 year	1	5.00	.00	1	5.00	.00
1-5 years	2	3.50	.71	2	5.00	.00
6-over	14	3.71	1.07	14	3.86	.95
Composite	17	3.77	1.03	17	4.06	.97
Noncertified Management						
0-1 year	0	--	--	0	--	--
1-5 years	2	5.00	.00	2	3.00	1.41
6-over	19	3.83	.86	17	3.77	1.25
Composite	21	3.95	.89	19	3.68	1.25
Instructional Staff						
0-1 year	12	4.17	.58	10	4.10	.99
1-5 years	16	3.94	1.00	14	3.71	.99
6-over	77	3.68	1.03	59	3.52	1.13
Composite	105	3.78	.99	83	3.60	1.10
Support Staff						
0-1 year	3	3.33	.58	0	--	--
1-5 years	19	3.58	.84	13	3.54	.66
6-over	49	3.57	1.26	39	3.49	1.10
Composite	71	3.56	1.14	52	3.50	1.00

staff groups receiving no in-service activities. Null hypothesis 3 was accepted.

The knowledge of LTI's economic development and training activities and the parallelism to the state of Wisconsin's commitment to economic development, as recorded by staff groups, is recorded in Table 7. All groups' pretest results were "some agreement" to "agree." Pretest means of all staff groups ranged from 3.37 to 3.90. There was a marked difference between staff groups on the posttest results. Group means ranged from 3.39 to 4.33. Standard deviations decreased indicating greater tendency toward the mean response. Therefore, null hypothesis 1 was rejected. The posttest results reflected strong agreement in the administrative staff, VTAE certified management staff, and noncertified management staff. Those three staff groups had received limited in-service activity. The two staff groups receiving no in-service activity posted posttest means almost identical to the pretest results. Therefore, null hypothesis 2 was also rejected.

Statement 18 (Table 8) asked staff to indicate whether or not the VTAE system should train for initial employment only. While all staff group totals recorded some or great disagreement, the standard deviations were wide in range. This indicated wide variance from agreement to disagreement. Standard deviations varied on pretest and posttest. There was a difference recorded among staff groups, and null hypothesis 1 was rejected. The three staff groups receiving limited in-service activities did not differ significantly from the two

Table 7

Comparison of Pretest and Posttest Results Obtained From Statement 15: I Feel That Economic Development and Training Parallels the State of Wisconsin's Commitment to Economic Development

Group	Pretest Sample	Pretest Mean	Pretest S.D.	Posttest Sample	Posttest Mean	Posttest S.D.
Administration						
0-1 year	0	--	--	0	--	--
1-5 years	0	--	--	0	--	--
6-over	6	3.83	0.98	6	4.33	0.52
Composite	6	3.83	.98	6	4.33	.52
VTAE Certified Management						
0-1 year	1	4.00	.00	1	5.00	.00
1-5 years	2	3.50	.71	2	4.00	1.41
6-over	14	3.57	1.34	14	4.07	.83
Composite	17	3.59	1.23	17	4.12	.86
Noncertified Management						
0-1 year	0	--	--	0	--	--
1-5 years	2	5.00	.00	2	3.50	.71
6-over	19	3.78	.88	17	4.06	.90
Composite	21	3.90	.91	19	4.00	.88
Instructional Staff						
0-1 year	12	3.73	.91	10	3.70	.68
1-5 years	16	3.36	1.08	14	3.46	.88
6-over	77	3.62	.87	59	3.32	.81
Composite	105	3.60	.90	83	3.39	.80
Support Staff						
0-1 year	3	3.33	.58	0	--	--
1-5 years	19	3.47	.91	13	3.62	.77
6-over	49	3.33	.91	39	3.37	.60
Composite	71	3.37	0.89	52	3.44	0.65

Table 8

Comparison of Pretest and Posttest Results Obtained From Statement 18: I Feel That the VTAE System Should Train for Initial Employment Only

Group	Pretest Sample	Pretest Mean	Pretest S.D.	Posttest Sample	Posttest Mean	Posttest S.D.
Administration						
0-1 year	0	--	--	0	--	--
1-5 years	0	--	--	0	--	--
6-over	6	1.33	0.52	6	1.33	0.52
Composite	6	1.33	.52	6	1.33	.52
VTAE Certified Management						
0-1 year	1	1.00	.00	1	1.00	.00
1-5 years	2	1.50	.71	2	1.00	.00
6-over	14	1.64	.75	14	1.64	.93
Composite	17	1.59	.71	17	1.53	.87
Noncertified Management						
0-1 year	0	--	--	0	--	--
1-5 years	2	1.00	.00	2	1.00	.00
6-over	19	1.67	1.38	17	1.71	.99
Composite	21	1.60	1.10	19	1.63	.96
Instructional Staff						
0-1 year	12	1.50	.67	10	1.70	.95
1-5 years	16	1.88	1.03	14	1.57	1.09
6-over	77	1.45	.62	59	1.75	1.01
Composite	105	1.52	.71	83	1.71	1.01
Support Staff						
0-1 year	3	2.67	.58	0	--	--
1-5 years	19	2.11	.94	13	2.08	.76
6-over	49	1.84	.92	39	1.82	.76
Composite	71	1.94	0.92	52	1.89	0.76

staff groups receiving no in-service activities. Therefore, null hypothesis 3 was accepted.

The staff groups' assessment of personal knowledge regarding economic development and training activities is identified in Table 9. A wide variance of mean was recorded on the pretest and posttest. Null hypothesis 1 was rejected. The administrative staff indicated agreement to knowledge, while VTAE certified management staff responded with some agreement. Noncertified management staff, instructional staff, and support staff recorded some disagreement. The mean of each staff group increased on the posttest. The noncertified management and instructional staff went from "some disagreement" to "some agreement."

The results of the three staff groups that received limited in-service activities were different from the two staff groups receiving no in-service activities. Therefore, null hypothesis 3 was rejected, and the alternate hypothesis accepted.

Agreement or disagreement to the relationship of Corporate Connection meetings and LTI's economic development goals is recorded in Table 10. Three of the four staff groups had less agreement to the statement on the posttest than on the pretest. The same four staff groups had a wider range of standard deviation on the posttest than on the pretest. The noncertified management staff group was the only staff group that increased in agreement. However, the increase was minimal. The standard deviation of the noncertified management staff group also had a wider range on the posttest than on the pretest. Differences in the knowledge of whether or not Corporate Connection

Table 9

Comparison of Pretest and Posttest Results Obtained From Statement 20: I Feel That I Am Knowledgeable About Economic Development Activities

Group	Pretest Sample	Pretest Mean	Pretest S.D.	Posttest Sample	Posttest Mean	Posttest S.D.
Administration						
0-1 year	0	--	--	0	--	--
1-5 years	0	--	--	0	--	--
6-over	6	4.33	0.82	6	4.33	0.52
Composite	6	4.33	.82	6	4.33	.52
VTAE Certified Management						
0-1 year	1	4.00	.00	1	5.00	.00
1-5 years	2	3.50	.71	2	3.50	.71
6-over	14	3.57	1.22	14	3.93	.73
Composite	17	3.59	1.12	17	3.94	.75
Noncertified Management						
0-1 year	0	--	--	0	--	--
1-5 years	2	2.50	2.12	2	2.00	.00
6-over	19	2.89	.96	17	3.47	.72
Composite	21	2.85	1.04	19	3.32	.82
Instructional Staff						
0-1 year	12	2.92	.90	10	3.00	.94
1-5 years	16	2.75	.93	14	2.93	1.14
6-over	77	2.90	1.03	59	3.07	.96
Composite	105	2.88	.99	83	3.04	.98
Support Staff						
0-1 year	3	2.00	1.00	0	--	--
1-5 years	19	2.84	.69	13	2.54	1.05
6-over	49	2.57	1.15	39	2.74	.94
Composite	71	2.62	1.05	52	2.69	0.96

Table 10

Comparison of Pretest and Posttest Results Obtained From Statement 21: I Feel That Corporate Connection Meetings Are Vital to the Success of LTI's Economic Development Goals

Group	Pretest Sample	Pretest Mean	Pretest S.D.	Posttest Sample	Posttest Mean	Posttest S.D.
Administration						
0-1 year	0	--	--	0	--	--
1-5 years	0	--	--	0	--	--
6-over	6	4.17	0.75	6	3.83	0.76
Composite	6	4.17	.75	6	3.83	.76
VTAE Certified Management						
0-1 year	1	5.00	.00	1	5.00	.00
1-5 years	2	3.50	.71	2	3.50	.71
6-over	14	3.64	.93	14	3.50	1.09
Composite	17	3.71	.92	17	3.59	1.06
Noncertified Management						
0-1 year	0	--	--	0	--	--
1-5 years	2	5.00	.00	2	4.00	1.41
6-over	19	3.61	.92	17	3.77	1.20
Composite	21	3.75	.97	19	3.79	1.18
Instructional Staff						
0-1 year	12	3.67	.65	10	3.70	.68
1-5 years	16	3.19	1.05	14	3.86	1.10
6-over	77	3.57	.87	59	3.36	.88
Composite	105	3.52	.88	83	3.49	.91
Support Staff						
0-1 year	3	3.33	.58	0	--	--
1-5 years	19	3.68	.75	13	3.15	.69
6-over	49	3.69	.75	39	3.49	.65
Composite	71	3.67	0.74	52	3.40	0.67

meetings are vital to the success of LTI's economic developent goals were recorded. Therefore, the null hypothesis was rejected, and the alternate hypothesis 3 was accepted.

Two of the three staff groups receiving limited in-service activities had less agreement on the posttest than the pretest. The third staff group had a slight increase in agreement. When compared to the two staff groups receiving no in-service activities, the three staff groups recorded different knowledge levels. Null hypothesis 3 was rejected, and the alternate hypothesis was accepted.

Responses to statement 4 were recorded in Table 11. Statement 4 asked staff to respond to whether or not economic development and training coordinators are the marketing specialists to business, industry, health, and human service agencies. A "strongly agree" and "agree" were recorded by administrative and the VTAE certified management staff groups. Both staff groups were identical in mean and standard deviation on the pretest and posttest. The noncertified management staff had some agreement on the pretest and agreement on the posttest. The standard deviation was lower on the posttest indicating a greater tendency toward the mean.

The instructional and support staff groups were in some agreement with the statement. The posttest results remained similar. The support staff had a slightly higher mean on the posttest with a smaller standard deviation than on the pretest. There was a difference betwen staff groups. Null hypothesis 1 was rejected, and the alternate hypothesis accepted.

Table 11

Comparison of Pretest and Posttest Results Obtained From Statement 4: I Feel That Economic Development and Training Coordinators Are the Marketing Specialists to Business, Industry, Health, and Human Services Agencies

Group	Pretest Sample	Pretest Mean	Pretest S.D.	Posttest Sample	Posttest Mean	Posttest S.D.
Administration						
0-1 year	0	--	--	0	--	--
1-5 years	0	--	--	0	--	--
6-over	6	4.50	0.84	6	4.50	0.55
Composite	6	4.50	.84	6	4.50	.55
VTAE Certified Management						
0-1 year	1	5.00	.00	1	5.00	.00
1-5 years	2	3.50	2.12	2	3.50	2.12
6-over	14	4.14	.86	14	4.14	.86
Composite	17	4.12	.99	17	4.12	.99
Noncertified Management						
0-1 year	0	--	--	0	--	--
1-5 years	2	4.00	1.41	2	4.00	1.41
6-over	19	3.61	1.20	17	4.12	.78
Composite	21	3.65	1.18	19	4.11	.81
Instructional Staff						
0-1 year	12	4.09	.70	10	3.50	.53
1-5 years	16	3.50	.89	14	3.29	.83
6-over	77	3.47	1.12	59	3.19	1.11
Composite	105	3.54	1.06	83	3.24	1.01
Support Staff						
0-1 year	3	3.67	1.16	0	--	--
1-5 years	19	3.63	.76	13	3.77	.93
6-over	49	3.51	1.24	39	3.95	.94
Composite	71	3.55	1.12	52	3.90	0.90

The three staff groups receiving limited in-service activities were in greater agreement than the two staff groups receiving no in-service training. Null hypothesis 3 was rejected. The alternate hypothesis was accepted.

A comparison of economic development coordination and on-campus coordination/supervision was addressed in statement 17 and recorded in Table 12. Each staff group's standard deviation was greater on the posttest than on the pretest. Response to the statement was "some agreement" for all groups. Differences did not exist among staff groups, and null hypothesis 1 was accepted. There was no difference among the three staff groups receiving limited in-service activities. Therefore, null hypothesis 3 was accepted.

Staff groups' reactions as to whether or not teaching for business and industry in economic development and training activities differs from traditional posthigh teaching were recorded in Table 13. The support staff group had some agreement with the statement on both the pretest and the posttest. The other four staff groups expressed agreement. There was an increased amount of agreement from the pretest to the posttest by administrative, VTAE certified management, and instructional staff. In most of the staff groups, standard deviations were smaller in the posttest than on the pretest. This indicates greater agreement toward the mean. There was a difference among staff groups; and null hypothesis 1 was rejected, and the alternate hypothesis was accepted. After limited in-service activities, there was no marked difference among the three staff groups receiving

Table 12

Comparison of Pretest and Posttest Results Obtained From Statement 17: I Feel That Economic Development and Training Coordination Is More Difficult Than On-Campus Coordination/Supervision

Group	Pretest Sample	Pretest Mean	Pretest S.D.	Posttest Sample	Posttest Mean	Posttest S.D.
Administration						
0-1 year	0	--	--	0	--	--
1-5 years	0	--	--	0	--	--
6-over	6	3.17	0.75	6	3.17	1.47
Composite	6	3.17	.75	6	3.17	1.47
VTAE Certified Management						
0-1 year	1	1.00	.00	1	1.00	.00
1-5 years	2	2.50	.71	2	4.00	.00
6-over	14	3.21	1.12	14	3.36	1.34
Composite	17	3.00	1.17	17	3.29	1.36
Noncertified Management						
0-1 year	0	--	--	0	--	--
1-5 years	2	2.00	1.41	2	1.50	.71
6-over	19	3.39	.79	17	3.06	.97
Composite	21	3.25	.91	19	2.90	1.05
Instructional Staff						
0-1 year	12	4.00	.78	10	4.50	.53
1-5 years	16	3.25	1.07	14	3.71	.99
6-over	77	3.50	1.00	59	3.50	1.11
Composite	105	3.52	1.00	83	3.66	1.08
Support Staff						
0-1 year	3	3.00	1.00	0	--	--
1-5 years	19	3.42	.77	13	3.50	.67
6-over	49	3.43	.77	39	3.46	.99
Composite	71	3.41	0.77	52	3.47	0.92

Table 13

Comparison of Pretest and Posttest Results Obtained From Statement 7: I Feel That Economic Development and Training Teaching Differs From Traditional Posthigh Teaching

Group	Pretest Sample	Pretest Mean	Pretest S.D.	Posttest Sample	Posttest Mean	Posttest S.D.
Administration						
0-1 year	0	--	--	0	--	--
1-5 years	0	--	--	0	--	--
6-over	6	4.50	0.84	6	4.83	0.41
Composite	6	4.50	.84	6	4.83	.41
VTAE Certified Management						
0-1 year	1	5.00	.00	1	4.00	.00
1-5 years	2	3.50	2.12	2	5.00	.00
6-over	14	4.14	.86	14	4.14	.95
Composite	17	4.12	.99	17	4.24	.90
Noncertified Management						
0-1 year	0	--	--	0	--	--
1-5 years	2	4.50	.71	2	4.50	.71
6-over	19	4.17	.71	17	4.00	.87
Composite	21	4.20	.70	19	4.05	.85
Instructional Staff						
0-1 year	12	4.20	.62	10	4.20	.92
1-5 years	16	4.13	.72	14	4.29	.61
6-over	77	4.03	.91	59	4.24	.88
Composite	105	4.07	.85	83	4.24	.84
Support Staff						
0-1 year	3	4.00	1.00	0	--	--
1-5 years	19	3.68	.89	13	3.62	.96
6-over	49	3.78	1.12	39	3.87	.82
Composite	71	3.76	1.05	52	3.80	0.86

in-service and the two staff groups receiving no in-service. Therefore, null hypothesis 3 was accepted.

The agreement or disagreement to statement 10 is recorded in Table 14. Staff were asked whether they felt economic development and training should hire and assign specific instructors for teaching only in the business and industry situations. All staff groups had some agreement on the pretest. The posttest recorded increased agreement in the administrative and VTAE certified management staff groups. There was a difference among staff groups. Null hypothesis 1 was rejected, and the alternate hypothesis was accepted.

The three staff groups receiving limited in-service activities recorded changes in the results. The two staff groups receiving no in-service recorded similar data in the posttest as on the pretest. Null hypothesis 3 was rejected. The alternate hypothesis was accepted.

Staff responses to whether economic development and training courses that met business and industry needs could be the courses taught in full-time programs are indicated in Table 15. The responses resulted in the widest range of means of any of the instrument's statements. Most staff groups also had a large spread of standard deviations. Administrative staff, noncertified management staff, and instructional staff increased in agreement with the statement between the pretest and the posttest. VTAE certified management and support staff decreased in the amount of agreement between the pretest and the posttest. Standard deviations were wider in range on the posttest than on the pretest indicating greater disagreement from the mean. There

Table 14

Comparison of Pretest and Posttest Results Obtained From Statement 10: I Feel That Economic Development and Training Should Hire and Assign Specific Instructors for Teaching Only in Business-Industry Situations

Group	Pretest Sample	Pretest Mean	Pretest S.D.	Posttest Sample	Posttest Mean	Posttest S.D.
Administration						
0-1 year	0	--	--	0	--	--
1-5 years	0	--	--	0	--	--
6-over	6	2.83	1.33	6	3.00	0.89
Composite	6	2.83	1.33	6	3.00	.89
VTAE Certified Management						
0-1 year	1	3.00	.00	1	3.00	.00
1-5 years	2	2.50	.71	2	2.50	.71
6-over	14	2.93	1.14	14	3.29	1.27
Composite	17	2.88	1.05	17	3.18	1.19
Noncertified Management						
0-1 year	0	--	--	0	--	--
1-5 years	2	2.00	1.41	2	2.00	.00
6-over	19	3.28	1.07	17	2.82	.95
Composite	21	3.15	1.14	19	2.74	.93
Instructional Staff						
0-1 year	12	2.92	1.38	10	3.00	1.05
1-5 years	16	2.13	1.09	14	2.07	.83
6-over	77	2.73	1.30	59	2.76	1.15
Composite	105	2.66	1.29	83	2.68	1.12
Support Staff						
0-1 year	3	2.67	1.16	0	--	--
1-5 years	19	3.53	.85	13	2.54	.97
6-over	49	2.88	.97	39	3.00	1.67
Composite	71	2.92	0.94	52	2.88	1.05

Table 15

Comparison of Pretest and Posttest Results Obtained From Statement 11: I Feel That Economic Development and Training Courses to Meet the Needs of Business and Industry Can Be the Courses Taught in Full-Time Programs

Group	Pretest Sample	Pretest Mean	Pretest S.D.	Posttest Sample	Posttest Mean	Posttest S.D.
Administration						
0-1 year	0	--	--	0	--	--
1-5 years	0	--	--	0	--	--
6-over	6	2.50	1.05	6	2.67	1.21
Composite	6	2.50	1.05	6	2.67	1.21
VTAE Certified Management						
0-1 year	1	5.00	.00	1	4.00	.00
1-5 years	2	3.50	.71	2	2.00	1.41
6-over	14	3.01	.96	14	2.71	1.20
Composite	17	3.18	1.02	17	2.71	1.21
Noncertified Management						
0-1 year	0	--	--	0	--	--
1-5 years	2	1.50	.71	2	2.00	.00
6-over	19	2.61	.98	17	2.65	1.00
Composite	21	2.50	1.00	19	2.58	.96
Instructional Staff						
0-1 year	12	3.17	1.27	10	3.30	1.06
1-5 years	16	2.50	1.16	14	2.43	1.34
6-over	77	2.78	1.12	59	2.86	1.17
Composite	105	2.78	1.14	83	2.84	1.19
Support Staff						
0-1 year	3	3.00	1.73	0	--	--
1-5 years	19	3.42	.84	13	3.15	.90
6-over	49	2.76	1.16	39	2.59	.91
Composite	71	2.94	1.13	52	2.73	0.93

were differences in the results among staff groups. Null hypothesis 1 was rejected, and the alternate hypothesis accepted.

Posttest results were analyzed. The posttest results of the staff groups receiving limited in-service activities were not different from the two staff groups receiving no in-service activities. Null hypothesis 3 was accepted.

Analysis of the Attitude Toward Economic Development and Training

Nine statements in the instrument (Appendix F) were designed to record staff attitudes toward economic development and training. Statements 1, 5, 8, 9, 14, 16, 19, 22, and 23 requested staff to indicate the attitude toward a variety of economic development and training aspects. The five possible responses were 5 = great agreement, 4 = agreement, 3 = some agreement, 2 = disagreement, and 1 = great disagreement. The raw data were transferred into an LTI computer having an SPSSX program. The nine statements addressing staff attitude tested two null hypotheses:

> Null Hypothesis 2: There will be no difference in the attitude toward economic development and training as recorded by administrative, VTAE certified management, noncertified management, instructional staff, and support staff.
>
> Null Hypothesis 4: There will be no difference in the attitude toward economic development and training between the three staff groups receiving in-service training activities and the two groups receiving no formal in-service training activities.

Three tables (Tables 16, 17, and 18) recorded the attitude of staff in regard to the economic development and training instructional work load distribution, equitable economic development and training

instructional assignments, and the work load appropriations. Table 16 reflects the staff attitude toward equitable economic development and training instructional assignments involving all LTI instructional staff. The administrative staff group was in agreement on the pretest and in some agreement on the posttest. Noncertified management staff, instructional staff, and support staff had less agreement with the statements on the posttest than on the pretest. The VTAE certified management staff had a slight increase in agreement on the posttest than on the pretest. There was a difference among staff groups. Therefore, null hypothesis 2 was rejected, and the alternate hypothesis was accepted.

There was no significant difference among the posttest results of the three staff groups receiving limited in-service activities and the posttest results of the two staff groups receiving no in-service activities. Therefore, null hypothesis 4 was accepted.

Staff were asked whether or not economic development and training should be equally distributed among instructional staff. Table 17 shows that four of the five staff groups disagreed with the statement on both the pretest and the posttest. The support staff group had some agreement on the pretest. The posttest results for the support staff recorded some disagreement. The noncertified management staff had some disagreement on the pretest and some agreement on the posttest. There were differences among all staff groups. Null hypothesis 2 was rejected. The alternate hypothesis was accepted.

Table 16

Comparison of Pretest and Posttest Results Obtained From Statement 5: I Feel That Economic Development and Training Should Involve All of LTI's Instructional Staff

Group	Pretest Sample	Pretest Mean	Pretest S.D.	Posttest Sample	Posttest Mean	Posttest S.D.
Administration						
0-1 year	0	--	--	0	--	--
1-5 years	0	--	--	0	--	--
6-over	6	4.17	0.75	6	3.67	1.03
Composite	6	4.17	.75	6	3.67	1.03
VTAE Certified Management						
0-1 year	1	3.00	.00	1	2.00	.00
1-5 years	2	3.50	2.12	2	3.50	2.12
6-over	14	3.07	1.27	14	3.50	1.02
Composite	17	3.12	1.27	17	3.41	1.12
Noncertified Management						
0-1 year	0	--	--	0	--	--
1-5 years	2	3.00	2.83	2	3.50	.71
6-over	19	3.83	.92	17	3.71	1.45
Composite	21	3.75	1.18	19	3.68	1.00
Instructional Staff						
0-1 year	12	3.83	1.19	10	3.70	1.06
1-5 years	16	3.81	1.42	14	3.79	1.05
6-over	77	3.90	1.08	59	3.42	1.28
Composite	105	3.88	1.14	83	3.52	1.21
Support Staff						
0-1 year	3	3.67	1.53	0	--	--
1-5 years	19	3.53	.84	13	3.62	.77
6-over	49	3.94	1.03	39	3.59	1.07
Composite	71	3.80	1.00	52	3.60	1.00

Table 17

Comparison of Pretest and Posttest Results Obtained From Statement 8: I Feel That Economic Development and Training Teaching Should Be Distributed Equally Among Instructional Staff

Group	Pretest Sample	Pretest Mean	Pretest S.D.	Posttest Sample	Posttest Mean	Posttest S.D.
Administration						
0-1 year	0	--	--	0	--	--
1-5 years	0	--	--	0	--	--
6-over	6	2.00	0.89	6	1.83	1.17
Composite	6	2.00	.89	6	1.83	1.17
VTAE Certified Management						
0-1 year	1	2.00	.00	1	2.00	.00
1-5 years	2	2.50	2.12	2	3.00	1.41
6-over	14	2.36	.84	14	1.86	.86
Composite	17	2.35	.93	17	2.00	.94
Noncertified Management						
0-1 year	0	--	--	0	--	--
1-5 years	2	2.50	.71	2	3.50	.71
6-over	19	2.94	.73	17	2.94	.66
Composite	21	2.90	.72	19	3.00	.67
Instructional Staff						
0-1 year	12	2.92	.67	10	2.90	.88
1-5 years	16	2.75	.78	14	2.50	1.09
6-over	77	2.53	1.17	59	2.74	1.18
Composite	105	2.61	1.07	83	2.72	1.13
Support Staff						
0-1 year	3	3.67	.58	0	--	--
1-5 years	19	3.11	.57	13	2.85	.69
6-over	49	3.02	1.16	39	2.78	.98
Composite	71	3.07	1.01	52	2.80	0.90

Two of the three staff groups receiving limited in-service activities had greater disagreement on the posttest than on the pretest. The noncertified management staff group's mean was higher on the posttest than on the pretest. There was no significant difference among staff groups receiving limited in-service activities and the staff groups receiving no in-service activities. Null hypothesis 4 was accepted.

Statement 9 (Table 18) asked staff whether the current work load formula for economic development and training activities was adequate. The instructional staff recorded the lowest agreement on both the pretest and the posttest. The other staff groups recorded mean scores indicating some agreement. There was a difference among staff groups, and null hypothesis 2 was rejected. The alternate hypothesis was accepted.

The three staff groups that received limited in-service activities recorded slight changes in the posttest mean. Standard deviations were greater on the posttest than on the pretest. Compared to the two staff groups that did not receive in-service activity, a difference was recorded. Therefore, null hypothesis 4 was rejected; and the alternate hypothesis was accepted.

The attitude of staff toward communications regarding economic development and training activities was recorded in Tables 19, 20, and 21. Table 19 records staff agreement or disagreement as to whether or not economic development and training decisions are made with

Table 18

Comparison of Pretest and Posttest Results Obtained From Statement 9: I Feel That Economic Development and Training Instruction Receives Adequate Consideration on the Present Work Load Formula

Group	Pretest Sample	Pretest Mean	Pretest S.D.	Posttest Sample	Posttest Mean	Posttest S.D.
Administration						
0-1 year	0	--	--	0	--	--
1-5 years	0	--	--	0	--	--
6-over	6	3.67	0.32	6	3.50	0.55
Composite	6	3.67	.32	6	3.50	.55
VTAE Certified Management						
0-1 year	1	4.00	.00	1	5.00	.00
1-5 years	2	3.50	2.12	2	4.50	.71
6-over	14	2.93	.73	14	3.43	1.09
Composite	17	3.06	.90	17	3.65	1.12
Noncertified Management						
0-1 year	0	--	--	0	--	--
1-5 years	2	3.50	.71	2	4.00	1.41
6-over	19	3.06	.66	17	3.27	.80
Composite	21	3.11	.66	19	3.35	.86
Instructional Staff						
0-1 year	12	3.00	1.00	10	3.10	1.29
1-5 years	16	2.87	1.46	14	2.23	1.24
6-over	77	2.44	1.26	59	2.27	1.14
Composite	105	2.57	1.27	83	2.37	1.19
Support Staff						
0-1 year	3	3.33	.58	0	--	--
1-5 years	19	3.05	.78	13	2.75	.75
6-over	49	3.17	.88	39	3.09	.62
Composite	71	3.15	0.83	52	3.00	0.67

Table 19

Comparison of Pretest and Posttest Results Obtained From Statement 1: I Feel That Economic Development and Training Decisions Are Made With Instructional Staff Participation

Group	Pretest Sample	Pretest Mean	Pretest S.D.	Posttest Sample	Posttest Mean	Posttest S.D.
Administration						
0-1 year	0	--	--	0	--	--
1-5 years	0	--	--	0	--	--
6-over	6	3.00	1.10	6	3.67	0.52
Composite	6	3.00	1.10	6	3.67	.52
VTAE Certified Management						
0-1 year	1	5.00	.00	1	5.00	.00
1-5 years	2	2.50	.71	2	3.50	.71
6-over	14	3.29	.47	14	3.57	.65
Composite	17	3.29	.68	17	3.65	.70
Noncertified Management						
0-1 year	0	--	--	0	--	--
1-5 years	2	3.00	.00	2	3.00	.00
6-over	19	3.11	1.08	17	3.18	.95
Composite	21	3.10	1.02	19	3.16	.90
Instructional Staff						
0-1 year	12	3.64	.92	10	3.50	.97
1-5 years	16	3.25	1.18	14	3.14	1.03
6-over	77	2.87	1.03	59	2.81	.99
Composite	105	3.01	1.07	83	2.95	1.01
Support Staff						
0-1 year	3	3.33	.58	0	--	--
1-5 years	19	3.26	.56	13	3.09	.54
6-over	49	3.08	.95	39	3.22	.71
Composite	71	3.14	0.85	52	3.19	0.66

instructional staff participation. All staff groups recorded some agreement. Null hypothesis 2 was rejected, and the alternate hypothesis was accepted.

The three staff groups receiving limited in-service activities had higher posttest means than pretest means. The two staff groups receiving no in-service changed slightly (-.06 and +.05). Therefore, null hypothesis 4 was rejected; and the alternate hypothesis was accepted.

Statement 14 (Table 20) asked whether feedback from instructional staff was used in making economic development and training decisions. The administrative staff and VTAE certified staff recorded "agreement" to "great agreement." The three other staff groups recorded "some agreement" to "agreement." There was a difference among staff groups, and null hypothesis 2 was rejected. The alternate hypothesis was accepted.

The three staff groups receiving limited in-service activities had an increased agreement on the posttests. The two staff groups receiving no in-service decreased in the amount of agreement. There was a difference among the collective staff groups. Null hypothesis 4 was rejected, and the alternate hypothesis was accepted.

The responses to statement 23 is recorded in Table 21. Staff were asked to respond to whether or not there was a planned and effective communication between economic development personnel and divisional program areas. All staff groups had some agreement. Null hypothesis 2 was accepted.

Table 20

Comparison of Pretest and Posttest Results Obtained From Statement 14: I Feel That Economic Development and Training Decisions Made Take Into Consideration the Feedback From Instructional Staff

Group	Pretest Sample	Pretest Mean	Pretest S.D.	Posttest Sample	Posttest Mean	Posttest S.D.
Administration						
0-1 year	0	--	--	0	--	--
1-5 years	0	--	--	0	--	--
6-over	6	3.83	0.98	6	4.33	0.52
Composite	6	3.83	.98	6	4.33	.52
VTAE Certified Management						
0-1 year	1	5.00	.00	1	5.00	.00
1-5 years	2	4.50	.71	2	3.50	.71
6-over	14	3.86	.78	14	4.00	.78
Composite	17	4.00	.79	17	4.00	.79
Noncertified Management						
0-1 year	0	--	--	0	--	--
1-5 years	2	3.50	2.12	2	3.00	.00
6-over	19	3.33	.84	17	3.88	.93
Composite	21	3.35	.93	19	3.79	.92
Instructional Staff						
0-1 year	12	3.91	.54	10	3.90	.74
1-5 years	16	3.13	1.09	14	3.50	1.40
6-over	77	3.55	1.09	59	3.24	1.20
Composite	105	3.52	1.06	83	3.37	1.20
Support Staff						
0-1 year	3	3.67	1.16	0	--	--
1-5 years	19	3.47	.77	13	3.23	.60
6-over	49	3.50	1.03	39	3.32	.75
Composite	71	3.50	0.96	52	3.30	0.71

Table 21

Comparison of Pretest and Posttest Results Obtained From Statement 23: I Feel That There Is Planned and Effective Communication Between Economic Development Personnel and Divisional Program Areas

Group	Pretest Sample	Pretest Mean	Pretest S.D.	Posttest Sample	Posttest Mean	Posttest S.D.
Administration						
0-1 year	0	--	--	0	--	--
1-5 years	0	--	--	0	--	--
6-over	6	2.33	1.03	6	2.67	0.52
Composite	6	2.33	1.03	6	2.67	.52
VTAE Certified Management						
0-1 year	1	2.00	.00	1	3.00	.00
1-5 years	2	2.50	.71	2	2.00	.00
6-over	14	2.71	.73	14	2.79	.58
Composite	17	2.65	.70	17	2.71	.59
Noncertified Management						
0-1 year	0	--	--	0	--	--
1-5 years	2	2.50	.71	2	1.50	.71
6-over	19	2.78	.88	17	3.06	.83
Composite	21	2.75	.85	19	2.90	.94
Instructional Staff						
0-1 year	12	3.00	.78	10	3.00	.47
1-5 years	16	2.13	.96	14	2.36	.84
6-over	77	2.65	.91	59	2.17	.91
Composite	105	2.61	.92	83	2.30	.89
Support Staff						
0-1 year	3	3.00	.00	0	--	--
1-5 years	19	3.00	.47	13	2.83	.58
6-over	49	2.72	.96	39	2.83	.94
Composite	71	2.81	0.83	52	2.83	0.86

The posttest results also recorded some agreement for all staff groups. The three staff groups that received limited in-service activities had minimal increases in the staff groups' means (+.34, +.06, +.15). The two staff groups that did not have in-service recorded lower or the identical mean scores. There was a difference between the two staff groups. Therefore, null hypothesis 4 was rejected; and the alternate hypothesis was accepted.

The attitude toward motivation of administrative staff, VTAE certified management staff, and instructional staff to become involved with economic development activities were recorded in Tables 22, 23, and 24. Table 22 recorded staff response to whether or not administrative personnel were highly motivated to become involved with economic development and training activities. Administrative staff and noncertified management staff expressed agreement on the pretest. The three other staff groups expressed some agreement. Null hypothesis 2 was rejected, and the alternate hypothesis was accepted.

The posttest recorded only administrative staff in agreement. The noncertified management staff mean had declined below the agreement level. The standard deviation of the noncertified management staff was also smaller than the pretest. The VTAE certified management staff had less agreement on the posttest than on the pretest. The two staff groups receiving no in-service activities recorded very similar posttest scores when compared to the pretest scores. Based on these results, null hypothesis 4 was accepted.

Table 22

Comparison of Pretest and Posttest Results Obtained From Statement 19: I Feel That LTI's Administrative Personnel Are Highly Motivated to Become Involved With Economic Development and Training Activities

Group	Pretest Sample	Pretest Mean	Pretest S.D.	Posttest Sample	Posttest Mean	Posttest S.D.
Administration						
0-1 year	0	--	--	0	--	--
1-5 years	0	--	--	0	--	--
6-over	6	4.00	0.63	6	4.00	0.63
Composite	6	4.00	.63	6	4.00	.63
VTAE Certified Management						
0-1 year	1	3.00	.00	1	3.00	.00
1-5 years	2	3.00	1.41	2	3.00	1.41
6-over	14	3.64	1.01	14	3.21	1.12
Composite	17	3.53	1.01	17	3.18	1.07
Noncertified Management						
0-1 year	0	--	--	0	--	--
1-5 years	2	4.50	.71	2	4.00	.00
6-over	19	4.00	.84	17	3.94	.83
Composite	21	4.05	.83	19	3.95	.78
Instructional Staff						
0-1 year	12	3.83	.58	10	3.60	.70
1-5 years	16	2.94	1.00	14	3.39	.65
6-over	77	3.29	.89	59	3.07	.88
Composite	105	3.30	.90	83	3.19	.84
Support Staff						
0-1 year	3	3.67	.58	0	--	--
1-5 years	19	3.26	.81	13	3.17	.58
6-over	49	3.39	.91	39	3.65	.92
Composite	71	3.37	0.87	52	3.53	0.87

The staff's attitude regarding VTAE certified management's (supervisors and coordinators) motivation to become involved with economic development and training activities was similar (Table 23). The majority of staff groups had agreement. The administrative staff had some agreement on the pretest, while the VTAE certified management staff had some agreement on the posttest. There was a difference among staff groups. Null hypothesis 2 was rejected, and the alternate hypothesis was accepted. The three staff groups receiving limited in-service activities did not differ from the two staff groups receiving no in-service. Null hypothesis 4 was accepted.

The attitude toward the instructional staff's motivation to become involved with economic development and training activities was recorded in Table 24. All staff groups recorded disagreement with the statement. Means differed only slightly. Null hypothesis 2 was accepted.

The limited in-service activities would not impact this statement. Likewise, posttest results were similar to pretest results. Null hypothesis 4 was also accepted.

Analysis of the Strategic Plan Statements and Emphasis

Part two of the instrument was a reprint of the LTI board's 1985-86 strategic plan. Four of the ten strategic plan items related to economic development and training. Each staff member was asked to indicate which items should receive high, medium, or low emphasis. Responses were recorded by circling H (high), M (medium), or L (low).

Table 23

Comparison of Pretest and Posttest Results Obtained From Statement 16: I Feel That LTI's Supervisors and Coordinators Are Highly Motivated to Become Involved With Economic Development and Training Activities

Group	Pretest Sample	Pretest Mean	Pretest S.D.	Posttest Sample	Posttest Mean	Posttest S.D.
Administration						
0-1 year	0	--	--	0	--	--
1-5 years	0	--	--	0	--	--
6-over	6	2.83	1.17	6	3.67	0.52
Composite	6	2.83	1.17	6	3.67	.52
VTAE Certified Management						
0-1 year	1	2.00	.00	1	3.00	.00
1-5 years	2	3.50	.71	2	2.50	.71
6-over	14	3.29	.73	14	2.79	.89
Composite	17	3.24	.75	17	2.77	.83
Noncertified Management						
0-1 year	0	--	--	0	--	--
1-5 years	2	2.00	1.41	2	2.00	1.41
6-over	19	3.33	.91	17	3.41	.80
Composite	21	3.20	1.01	19	3.26	.93
Instructional Staff						
0-1 year	12	3.75	.75	10	3.60	.70
1-5 years	16	3.13	.81	14	3.29	.99
6-over	77	3.42	.92	59	2.88	1.00
Composite	105	3.41	.89	83	3.04	.99
Support Staff						
0-1 year	3	4.67	.58	0	--	--
1-5 years	19	3.26	.81	13	3.39	.77
6-over	49	3.06	.86	39	3.32	.84
Composite	71	3.19	0.89	52	3.33	0.82

Table 24

Comparison of Pretest and Posttest Results Obtained From Statement 22: I Feel That LTI's Instructional Staff Are Highly Motivated to Become Involved With Economic Development and Training Activities

Group	Pretest Sample	Pretest Mean	Pretest S.D.	Posttest Sample	Posttest Mean	Posttest S.D.
Administration						
0-1 year	0	--	--	0	--	--
1-5 years	0	--	--	0	--	--
6-over	6	2.33	0.52	6	2.83	0.98
Composite	6	2.33	.52	6	2.83	.98
VTAE Certified Management						
0-1 year	1	1.00	.00	1	3.00	.00
1-5 years	2	3.50	1.41	2	2.50	.71
6-over	14	2.43	.67	14	2.64	1.15
Composite	17	2.41	.80	17	2.65	1.06
Noncertified Management						
0-1 year	0	--	--	0	--	--
1-5 years	2	1.00	.00	2	2.50	.71
6-over	19	3.00	.77	17	3.00	.79
Composite	21	2.80	.95	19	2.95	.78
Instructional Staff						
0-1 year	12	3.33	.65	10	3.30	.48
1-5 years	16	2.94	.93	14	2.43	.85
6-over	77	2.66	.87	59	2.44	.79
Composite	105	2.78	.88	83	2.54	.82
Support Staff						
0-1 year	3	3.33	.58	0	--	--
1-5 years	19	3.00	.47	13	2.92	.76
6-over	49	2.81	.79	39	2.61	.80
Composite	71	2.88	0.72	52	2.69	0.80

Statements were tabulated using a SPSSX computer program. The results were recorded in percentages. The results of the ten strategic plan statements tested the null hypothesis:

> Null Hypothesis 5: There will be no difference in the awareness of the LTI board's ten strategic plan statements between the administrative, VTAE certified management, noncertified management, instructional staff, and support staff.

The percentage of staff groups' concurrence with the board's emphasis of strategic plan statements is recorded in Table 25. The administrative staff group concurred with the board's emphasis on three of the ten statements. Only two other staff groups concurred with the board emphasis on two strategic plan statements. Both statements were high emphasis statements. The VTAE certified management staff group concurred on a posttest statement. The noncertified management staff group concurrred on a pretest statement. Other percentages of concurrence ranged from 5 percent to 94.7 percent. Differences in awareness were recorded. Null hypothesis 5 was rejected, and the alternate hypothesis 5 was accepted.

Table 25

Percentage of Staff Groups Concurring With Board's Emphasis of Strategic Plan Statements

	Administration		VTAE Certified Management		Noncertified Management		Instructional Staff		Support Staff	
	Pre N=6	Post N=6	Pre N=17	Post N=17	Pre N=21	Post N=19	Pre N=104	Post N=83	Pre N=71	Post N=52
HIGH EMPHASIS										
Education for employment at entry-level position.	100%	100%	88.2%	94.1%	80%	63.2%	89.4%	86.7%	64.8%	59.6%
Retraining and upgrading for existing and new jobs.	100%	100%	88.2%	100%	100%	94.7%	90%	85.5%	88.7%	86.5%
Related training for apprentices.	33.3%	66.7%	41.2%	41.2%	25%	52.6%	51%	38.6%	47.9%	51.9%
Economic development related to customized training and contract services.	66.6%	66.7%	82.4%	70.6%	60%	57.9%	46.2%	41%	43.7%	40.4%

Table 25 (continued)

	Administration		VTAE Certified Management		Noncertified Management		Instructional Staff		Support Staff	
	Pre N=6	Post N=6	Pre N=17	Post N=17	Pre N=21	Post N=19	Pre N=104	Post N=83	Pre N=71	Post N=52
MEDIUM EMPHASIS										
Instruction in the basic behavioral skills/understanding required prior to vocational education or entrance into the job market.	52.9%	66.7%	52.9%	64.7%	45%	52.6%	44.7%	50.6%	40.8%	53.8%
Educational programs and services to the disadvantaged and the handicapped.	83.3%	66.7%	41.2%	64.7%	55%	57.9%	48.5%	50.6%	40.8%	59.6%
Courses for the adult student focused on achievement of long-range personal/vocational goals to improve their quality of life.	83.3%	50%	64.7%	47.1%	50%	47.4%	55.3%	42.2%	40.8%	53.8%
Collaboration and cooperation with public and private schools.	66.6%	83.3%	70.6%	47.1%	60%	42.1%	38.5%	36.1%	38%	42.3%

Table 25 (continued)

	Administration		VTAE Certified Management		Noncertified Management		Instructional Staff		Support Staff	
	Pre N=6	Post N=6	Pre N=17	Post N=17	Pre N=21	Post N=19	Pre N=104	Post N=83	Pre N=71	Post N=52
LOW EMPHASIS										
Coordination with other educational institutions and governmental bodies.	33.3%	33.3%	5.9%	5.9%	5%	5.3%	5%	9.6%	9.9%	5.8%
Community services and avocational or self-enrichment activities.	100%	100%	47.1%	41.2%	50%	42.1%	25%	42.2%	19.7%	21.2%

CHAPTER 5

Interpretation, Conclusions, and Recommendations

The purpose of the study was to analyze the knowledge and attitude of the LTI staff as related to economic development and training. It was hypothesized that the economic development and training mission had not been clearly articulated nor communicated to all staff. An in-depth organizational assessment was necessary to determine the knowledge and attitude base before and after limited in-service activities. Chapter 5 has been subdivided into three main sections: (1) Interpretation, (2) Conclusions, and (3) Recommendations.

Economic development and training was identified as a key component in keeping the work force of Wisconsin skilled and current (Chapter 1, page 16). Historically, the Wisconsin Vocational, Technical and Adult Education system had provided training for entry-level, occupation-specific jobs. However, with a decline in posthigh enrollments and specific occupational training, the retraining and upgrading for the currently employed emerged as a valid role for the VTAE system in Wisconsin. The retraining and upgrading became known as economic development and training. It provided benefits to both business and industry and the VTAE system.

The VTAE system provided a needed service to business and industry. It is estimated that "10 million workers are taking 18

million courses a year at a total cost to the companies of at least $40 to $50 billion per year" (Hodgkison, 1986:6). Retraining and upgrading of current employees is vital to corporate economy. In addition to providing business and industry with an educational resource, a partnership between education and business and industry assures corporate vitality, stabilized employment, increased quality of work life (Lusterman, 1977:6) and provides access to current and future technologies. An economic development and training instructor was quoted by Milbrath (1986:2) stating:

> Economic development gives me a chance to have contact with industry. It meets their needs but also my need to validate my program [LTI posthigh]. It also provides a possible chance to tour industry to see that what we are doing is current.

At the same time, the VTAE enrollment is bolstered with a new student population, and thus, revenues increase. The corporate facilities and equipment provide the VTAE system with high technology updates. Providing education to business and industry provides job security for current VTAE instructors. Business and industry personnel provide expertise for current VTAE educational program curricula.

The Lakeshore Technical Institute administration and board approved and implemented economic development and training as a part of adult and continuing education in 1978. An economic development and training team was formed at LTI in 1983. However, while select administrative staff and VTAE certified management staff promoted educational offerings and technical assistance to businesses and industries, many LTI staff were unaware of the economic development and training emphasis. Resistance to economic development and training

began because of a lack of knowledge and a lack of commitment to economic development and training activities. In 1985, the administrative staff endorsed an in-depth assessment of the LTI staff's knowledge of and attitude toward economic development and training as an initial step in the goal of districtwide commitment to the implementation of economic development and training activities.

The research design included three parts in addition to an extensive review of literature. An instrument was designed to record the knowledge and attitude of LTI staff regarding economic development and training. Part one was a pretest given to all full-time staff at the beginning of the 1985-86 school year. Two hundred and twenty full-time staff responded for a 100 percent rate of return.

Part two included limited in-service activities made available to the administrative staff, VTAE certified management staff, and the noncertified management staff (Appendix J) during the 1985-86 school year. The instructional staff and support staff groups did not receive formal in-service activities. Economic development and training activities continued during the 1985-86 school year on a status quo basis of previous years.

Part three was a posttest administered at the end of the 1985-86 school year to 214 full-time staff. The population decline of the full-time staff was due to one death and five resignations. An 80 percent rate of return of the total population was recorded with 177 staff responding. A 100 percent return rate was achieved from the administrative staff and the VTAE certified management staff. Two

noncertified management staff did not return the posttest, thus a 90 percent return. Twenty instructional staff did not return the posttest for a 79 percent return. Fifteen support staff did not return the posttest for a 73 percent rate of return.

The data gathered were presented, analyzed, and used to answer the research questions listed in Chapter 1, page 20. The results of the data analysis were used to form conclusions drawn from the in-depth study of staff attitude and knowledge regarding economic development and training. Recommendations were drafted for the improvement of economic development and training implementation at Lakeshore Technical Institute.

Interpretation

Research Question 1: Was there a difference in the knowledge of economic development and training between administrative, VTAE certified management, noncertified management, instructional, and support staff?

Economic development and training had been identified as a goal of LTI. Theoretically, each staff member plays a part in serving the educational needs of business and industry. Limited staff members have direct contact with the corporate management or the corporation's employees. It was hypothesized that many LTI staff were unaware of the economic development and training mission of LTI.

Select administrative staff received information regarding economic development and training from discussions with their counterparts in the state VTAE system. The economic development and training concepts were shared with board members and VTAE certified

management staff who became directly responsible for the coordination and supervision of economic development and training activities. Thus, various levels of knowledge and direct involvement with economic development and training existed among LTI staff. The results of the research substantiated those differences of knowledge. Only one of the fourteen statements designed to document staff knowledge of economic development and training had like pretest results. Staff members were asked whether economic development and training coordination is more difficult than on-campus coordination/supervision. All staff gave "middle of the road" responses. Large variances in standard deviations were also recorded. These two factors indicated agreement was not necesssarily existent; but rather, the indifference or lack of knowledge resulted in similar mean scores. The lack of knowledge or indifference regarding the roles and responsibilities of the economic development and training coordinators validates the need for information on job descriptions of economic development and training coordination to be shared with all LTI staff.

The other thirteen statements addressing the knowledge of economic development and training recorded pretest differences between all staff groups. The pretest differences may be justified by the wide range of individuals' direct contact with economic development and training information and direct involvement in serving the educational needs of business and industry. The administrative staff have more direct contact with the board than any of the other staff groups. The pretest responses of the administrative staff group recorded the

greatest agreement. Administrative staff agreed with ten of the thirteen knowledge statements regarding the VTAE mission and economic development and training goals. In response to another knowledge statement, the administrative staff was second in agreement to the group in greatest agreement. The two statements in which administrative staff were not in greatest agreement addressed the transfer of full-time courses into business and industry and hiring teachers specifically for business and industry. While the administrative staff may know the VTAE mission and economic development and training goals, the administrative staff may not have had direct contact with delivery of educational activities to business and industry. The direct contact would reinforce business and industry's mandates that the educational activities be delivered by instructors having the skills of teaching the employed adult learner (Lynton, 1984:109) and that the educational activities meet the corporation's specific need in an identified period of time (Gold, 1981:68-69).

Analysis of the VTAE certified management staff's pretest responses indicate either a lack of knowledge or resistance to economic development and training activities. Pretest responses to the knowledge statements were in opposition to the VTAE mission. The responses to the LTI goals of serving business and industry were also in opposition.

The noncertified staff's pretest data indicated less knowledge than the administrative staff but more knowledge than the instructional and support staff groups. These three groups, collectively, are

neither involved in the communication with the corporations nor are they involved in the direct delivery of educational services to business and industry.

> Research Question 2: Was there a difference in the attitude toward economic development and training between administrative, VTAE certified management, noncertified management, instructional, and support staff?

Differences in the knowledge of economic development and training activities by LTI staff groups were validated by the results of the pretest and research question 1. In addition to lack of knowledge, it was hypothesized that many of LTI staff's attitudes were less than positive. Attitudes can be influenced by knowledge or the lack of knowledge, direct or indirect involvement, and communication or the lack of communication with biased or unbiased individuals. The attitudes of staff were hypothesized as a negative force on the implementation of economic development and training activities at LTI.

Nine statements of the instrument addressed staff attitudes. Two statements had similar pretest responses from the staff groups. One statement receiving like results asked whether or not staff felt there was planned and effective communication between economic development and training personnel and the divisional areas. All staff groups disagreed. Standard deviations were small. The second attitude statement that received like responses from all staff groups asked staff whether or not instructional staff were highly motivated to become involved with economic development and training activities. All staff groups disagreed, and standard deviations were small.

The other seven statements addressing the attitudes toward economic development and training recorded pretest differences among all staff groups. The pretest differences may be attributed to the lack of knowledge needed to develop an attitude. Confusion resulting from inaccurate information or biased statements of opinion may also have contributed to the attitudinal differences.

> Research Question 3: Was there a difference in the knowledge of economic development and training when comparing the pretest and posttest data from the three groups receiving limited economic development and training in-service activities and the two staff groups receiving no economic development and training in-service?

In-service activities (Appendix J) were limited to the administrative staff, VTAE certified management staff, and noncertified management staff. In-service activities appear to have had a positive effect based on the posttest results of the administrative and VTAE certified management staff. In-service activities included speakers from out of the district, LTI staff, and written informational one-liners printed in weekly Announcements and on closed-circuit television. The increased knowledge appeared to be parallel with in-service that was presented by out-of-district speakers. The increase in knowledge was most frequently recorded by the administrative staff and VTAE certified management staff groups. The noncertified management staff group frequently had lower posttest mean scores than pretest mean scores.

The noncertified management staff had been included in the same in-service activities as the administrative staff and the VTAE certified management staff. The frequent decreased posttest mean of the

noncertified management staff could be interpreted as resistance to the economic development and training activities or an even greater confusion of district goals at the time of the posttest than at the time of the pretest. The fact that the noncertified management staff group did not and does not have direct contact or responsibility for economic development and training activities may have been responsible for some of the variance.

The instructional and support staff groups received no formal in-service activities. Posttest means reflected few changes in the knowledge base of instructional staff and support staff. If changes were noted, generally the changes reflected less agreement. The lower mean recorded by instructional staff may have been impacted by peripheral circumstances. During the same period of the research, another study was being conducted. An administrative internship project was identifying "obstacles within the institution that hindered the accomplishment of economic development components of LTI's mission" (Milbrath, 1986:1). Interviews were conducted with forty-two LTI instructors. Interview questions asked instructors to identify any problems that had been encountered, institutional obstacles, opinions on work load formulas, and the customization of educational offerings. Thus, economic development and training received much verbal attention during the 1985-86 school year. Milbrath (1986:1) stated, "The fact that interviews were taking place served to focus attention on the role of economic development within the institution." This may have

resulted in greater confusion or a more decisive commitment toward or against economic development and training.

The comparison of results among the three staff groups receiving limited in-service activities and the two staff groups receiving no in-service activities verified that in-service activities did increase the knowledge base. The pretest-posttest analysis warranted discussion because of the impact on the recommendations of the research. In-service activities increased knowledge areas of mission and goals. Specific mission and goal statements that recorded increased knowledge included student population and the parallelism between the VTAE system and the state of Wisconsin's economic development plan. The knowledge of the role of the teacher in economic development and training also increased. The review of literature had identified a decline in enrollment of posthigh-aged students (Cross, 1981:3) and an increased need for educational offerings from business and industry (Logan, 1985:13). All LTI staff groups agreed that economic development and training would provide LTI with a new student population. The posttest results were also in agreement. However, the agreement was weaker than the pretest agreement. Only VTAE certified management staff posttest responses were equal to or greater than the pretest responses. The posttest data supported that LTI staff were not aware of the employed adult being LTI's new student population.

If all staff groups agreed that economic development and training would provide a new student population, it would be logical to assume that staff groups would strongly disagree that the VTAE train

for initial employment only. Yet, the responses to statement 18 (page 86) did not validate the commitment to the employed adult as the new student population. Managers employed over six years did not strongly disagree. The newer employed managers more strongly disagreed and felt that the VTAE system should not train for initial employment only.

Lynton (1984:64) accused educational institutions of being driven by internal values and priorities. He continued in the accusation that educational institutions act as if they exist only to teach the young. It would appear that Lynton's accusations could be an appropriate evaluation of some LTI staff groups. Lack of knowledge of the board's strategic plan may have impacted the responses. However, lack of commitment to a new student population may also have caused varied responses. Milbrath's (1986:7) study identified some instructors' fear that:

> If we concentrate our efforts on economic development, our traditional student [posthigh]--especially those who are not employed or whose employer does not support their educational endeavors, may get sacrificed in our [LTI] quest to meet economic development needs of industry.

Discussion could include the resistance to change, the unawareness of the need for new student pouplations, and a lack of knowledge of VTAE mission in the 198Us to 199Us. However, the results support the need for the dissemination of information. The information to be disseminated includes the board's emphasis for employed new students served via economic development and training activities and the documentation

of the number of employed adult students served via economic development and training activities.

Staff groups disagreed that economic development and training should be delivered to business and industry by only four-year institutions. Yet, the posttest data were not unanimous that economic development and training should be delivered to business and industry by the VTAE system. Further research may be warranted to identify the reasons for individuals not in agreement of VTAE delivering educational services to business and industry. Several staff members indicated the VTAE system should give high priority to the full-time student (Appendix L). Lack of information about economic development and training activities with business and industry may have resulted in varying knowledge base.

The posttest data appears to correlate with Table 24 (page 114) data. A medium emphasis statement of the LTI board's strategic plan indicating collaboration and cooperation with public and private schools was felt to be high priority by 42 percent of instructional staff on the pretest and just under 50 percent on the posttest. A low emphasis item regarding coordination with other institutions and government bodies was felt to be high emphasis by 48 percent of the instructional staff. It appears that half of the instructional staff may regard the posthigh student as the primary mission.

Economic development and training activities are a planned sequence in the district's strategic planning process. Increased knowledge of the existence of the strategic plan was recorded by the

posttest results of administrative staff, VTAE certified management staff, and support staff. Decreased knowledge was recorded on posttest results by noncertified management staff and instructional staff.

The strategic plan was announced shortly after the pretest was administered. However, no formal presentation was made. The administrative staff and the VTAE certified management staff discussed the strategic plan during long-range planning. Increased knowledge of the strategic plan, but not including the levels of board emphasis, could have resulted. The support staff recorded increased knowledge of the strategic plan. Support staff have daily access to the closed-circuit television monitors and weekly Announcements. The informational one-liners (Appendix K) included strategic plan statements. The daily access to the information may have resulted in the increased knowledge. The noted decrease in knowledge of the strategic plan by noncertified management staff and instructional staff warrant further study. Access to the television and weekly Announcements was not as readily available to these two staff groups as they were to the other three staff groups. A lack of knowledge of the LTI board's strategic plan or disagreement with the strategic plan may also have impacted results.

Staff groups showed no strong commitment to whether or not economic development and training requests from business, industry, health, and human services should be met at all costs. Administrative staff and VTAE certified management staff increased their agreement with the statement on the posttest. The remaining three staff groups recorded greater disagreement on the posttest than on the pretest.

Staff members may not know enough facts to determine whether they agree or disagree. If the instrument were to be rewritten, the words "at all costs" should be reevaluated. Those two issues may have caused discrepancies in the results.

Administration and VTAE certified management posttest results reflected an increase in agreement of hiring and assigning specific instructors for teaching only in business and industry situations. It would appear that the increased knowledge and awareness of economic development and training impacted that change. The noncertified management group were in less agreement on the posttest than on the pretest. It may be theorized that the noncertified management staff group has limited involvement in educational activities for business and industry, and consequently, the awareness of business and industry teacher-specific issues are also limited.

The review of literature indicated successful instruction in an economic development and training activity is different than the traditional posthigh instruction. The LTI staff also felt economic development and training instruction was unique when compared to posthigh activities. LTI staff disagreed that economic development and training activities be distributed equally among LTI instructional staff. This is supported by several literary citations that instructors must possess personal characteristics and talents as well as an androgogical style of teaching in order to be successful in the teaching of economic development and training activities. It is evident that the administrative staff, VTAE certified management staff, and instructional

staff groups are aware that economic development and training teaching differs from the traditional posthigh. However, the lack of knowledge and the varying degrees of knowledge among LTI staff groups identified a need for the dissemination of information regarding economic development and training activities.

It was felt that economic development and training coordinators were the marketing specialists to business, industry, health, and human service agencies. Administrative staff, VTAE certified management staff, noncertified management staff, and support staff remained at the same agreement level or increased agreement on the posttest as on the pretest. The instructional staff decreased the agreement with a smaller standard deviation on the posttest than on the pretest. A successful economic development and training activity is dependent on instructional staff. If a problem exists in the perception that economic development and training coordinators are not the marketing specialists, the economic development and training activities could be jeopardized.

The administration staff was the only staff group indicating identical agreement on both the pretest and posttest knowledge of economic development and training activities. However, VTAE certified and noncertified management staff knowledge had increased as evidenced by the posttest results. The instructional staff and support staff had similar pretest and posttest results.

Research Question 4: Was there a difference in the attitude toward economic development and training when comparing the pretest and posttest data from the three staff groups receiving limited economic development and training in-service activities and the two staff groups receiving no economic development and training in-service activities?

Attitude was defined (Chapter 2, page 22) as a state of readiness to respond to a stimulus. Economic development and training activities were stimuli within LTI. The economic development and training stimuli often was received by staff with limited knowledge. Thus, a state of readiness was not always present. Differences in attitudes were recorded in eight of the nine attitudinal statements on the pretest.

In-service activities (Appendix J) were limited to administrative staff, VTAE certified management staff, and noncertified management staff. In-service activities did not appear to have had as much of an impact on the attitudes of LTI staff groups as in-service activities had on the knowledge of economic development and training. Analysis of the data identified economic development and training areas that must be communicated to LTI staff.

Staff groups did not view all of LTI's staff being involved with economic development and training. Individual job responsibilities are different. However, the goals of serving business and industry are in the institution's strategic plan. Noncertified management and support staff are two staff areas never involved with the direct delivery of economic development and training activities to business and industry. The importance of the individual staff responsible for providing economic development and training educational

activities must be communicated in order that staff are aware and committed to the strategic plan statements that impact economic development and training activities.

Communication between economic development personnel and the divisional program areas was recorded as not always planned or effective. Warmbrod (1983:19) emphasized strong leadership including making institutional goals known to staff and inspiring staff to a sense of commitment and cooperation. Yet the limited in-service activities provided during this study did not greatly affect the feeling that planned and effective communication existed at LTI.

An analysis of the communication of the economic development and training mission and activities appeared to be inconsistent and did not involve all staff. Staff were asked if economic development and training decisions were made with instructional staff participation. Administrative staff, VTAE certified staff, and noncertified management staff agreed more on the posttest than the pretest. However, the instructional staff disagreed on the posttest. When asked whether the economic development and training decisions took into consideration the feedback from instructional staff (Table 20, page 106), the three staff groups participating in in-service activities increased agreement. Milbrath (1986:11) interviewed forty-two instructors. Included in the final report was the statement, "One thing that stands out among the interview summaries is the tremendous amount of distrust that is voiced towards administrative and management staff." Distrust would strongly

impact instructional staff's responses to both issues. The instructional staff and support staff recorded less agreement.

The work load formula (Table 18, page 103) and economic development and training activities were felt to be adequate by the administrative staff, VTAE certified management staff, and noncertified management staff on the pretest. On the posttest, administrative staff still agreed; but the posttest mean was lower than the pretest mean. The VTAE certified management staff and noncertified management staff had greater agreement on the posttest. These three groups were in direct disagreement with the instructional staff who disagreed on the pretest and were stronger in the disagreement on the posttest. Milbrath's (1986:7) study identified that instructional staff perceived inequities and/or unfairness in compensation (work load). Milbrath stated, "There is a fear that other instructors may be getting a better deal." Instructional staff perceived that the work load formula credit received for economic development and training is not adequate. Support staff had a slightly lower posttest mean than pretest mean.

It was the attitude of the staff that the administrative staff was the only group having high motivation (Table 22, page 109) to become involved in economic development and training activities. While the administrative staff felt they were highly motivated, administrative staff did not perceive the VTAE management staff or instructional staff as being highly motivated. The VTAE certified management staff did not view administrative staff nor instructional staff as highly involved. It is critical that all staff groups know and believe in the

goals of the organization. Warmbrod (1983:19) addressed commitment as a responsibility of "top college administrators." Defined by Warmbrod, commitment is when boards, administrators, faculty, and support staff are "willing to do whatever it takes to get results." Instructional staff viewed the LTI administrative staff as somewhat motivated, VTAE certified management staff as somewhat motivated, and themselves as not being motivated to become involved with economic development and training activities.

The differences in attitude among staff groups indicates areas that can negatively impact the implementation of economic development and training activities at LTI. The instructional staff group was often not in agreement. Yet the instructional staff group is vital to economic development and training activities. The wide range of attitudinal differences identified a need for communication with staff groups to promote common understanding of the commitment and the common understanding of the interdependency of staff groups.

Research Question 5: Was there a difference in the knowledge based on the length of employment at LTI?

The data were presented by total staff groups for hypothesis testing. Within each staff group, the length of employment of staff members was recorded with respective deviations and means. The results in relationship to the length of employment was important in determining if the knowledge of economic development and training differed from one staff group to another staff group based on employment longevity.

Two hundred and twenty full-time staff members were included in the research. Sixteen staff members (7.2 percent) had been employed

less than a year. Thirty-nine (17.8 percent) had been employed one year but less than five years. One hundred and sixty-five of the two hundred and twenty staff members (75 percent) had been employed over five years. Therefore, the LTI staff can be described as a stable staff with three quarters of the individual staff members having over six years of employment.

There was a difference in the knowledge of economic development and training as it related to the mission and goals among staff groups based on length of employment of the staff groups. The longer the staff group was employed, the less agreement was recorded. This was consistent for all of the eight knowledge statements on mission and goals (Chapter 4, Tables 2-10) for the VTAE certified management staff. This was representative of the noncertified management staff group on four of the eight mission and goal statements. In only one instance the longer employed instructional staff group had greater agreement than the shorter length of employment instructional staff group. The longer employed support staff group recorded less agreement than the newer employed group on only two of the ten statements.

Resistance to change was felt to be a factor from the first implementation of economic development and training. Resistance should be considered rather than lack of knowledge. This is based on the longer employed staff group having less agreement to the mission and goal statements. It would be assumed that longer employment and in-service activities would increase the knowledge of economic development

and training. However, when lower knowledge from these staff groups is recorded, other explanations to the findings must be sought.

The longer employed staff group may be experiencing confusion on the mission and goals of LTI. Past practice may continue to appear sound and stable. Additional leadership and communication appear to be vital to the future of economic development and training at LTI based on the discussion of research question five.

The two knowledge statements (Tables 12 and 13, pages 93 and 94) regarding the work responsibility of the economic development and training coordinators recorded greater agreement by the staff groups having longer employment than by more recently employed staff groups. If staff were not knowledgeable about economic development and training goals for LTI, it is logical that little would be known regarding the coordinator's roles and responsibility.

There was no pattern to the responses of the staff on the knowledge statements addressing hiring instructional staff specifically for economic development and training and the difference between post-high and economic development and training teaching and course content (Tables 13, 14, and 15, pages 96, 97, and 100). Some LTI staff have believed and still believe that economic development and training activities should be equally distributed among teaching staff. Several sources from the literature review stated that not all teachers are effective in corporate education (Gold, 1981:67). Technical competencies are needed as well as the ability to teach the adult learner. Yet economic development and training instruction is not favored by all at

LTI. One memorandum from an instructor (Quicker, 1984:2) stated, "I will neither carry more than my fair load as a business and industry instructor nor act as a circuit instructor for this district while others remain solely on campus."

Research Question 6: Was there a difference in the attitude based on the length of staff employment at LTI?

The data were presented by total staff groups for hypothesis testing. Within each staff group, the length of employment of staff members was recorded with respective deviations and means. The results in relationship to the length of employment was important in determining if the attitude toward economic development and training differed from one staff group to another staff group based on employment longevity.

Two hundred and twenty full-time staff members were included in the research. Sixteen staff members (7.2 percent) had been employed less than a year. Thirty-nine (17.8 percent) had been employed one year but less than five years. One hundred and sixty-five of the two hundred and twenty staff members (75 percent) had been employed over five years. Therefore, the LTI staff can be described as a stable staff with three quarters of the individual staff members having over six years of employment.

There was no difference in the attitude towards economic development and training between staff groups based on length of employment. However, the attitude toward staff feedback and the participation between economic development and training staff and program area staff regarding economic development and training decision making

had greater agreement by staff in the zero to one year and one to five years of employment than staff with over six years of longevity. There was no pattern of responses to the attitude toward motivation of staff groups to become involved with economic development and training. It appears that LTI staff do not have strong convictions of attitude toward economic development and training at the current time. The dissemination of economic development and training goals as stated in the board's strategic plan and identification of each staff member's active involvement in economic development and training may foster a more positive attitude than currently exists.

> Research Question 7: Was there a difference in the knowledge of the LTI board's strategic plan statements and emphasis between administrative, VTAE certified management, noncertified management, instructional staff, and support staff?

Vast differences were recorded among administrative staff, VTAE certified management staff, noncertified management staff, instructional staff, and support staff. There is strong evidence that staff are unaware of the strategic plan statements. In addition, the staff is unaware of the priority emphasis put on each statement by the LTI board. The administrative staff indicated identical emphasis to the board's emphasis on two of the ten statements (Chapter 4, Table 24, and Appendix L).

Several items relating to initial occupational training and the educating of individuals directly out of high school were given higher emphasis than board emphasis. This suggests that there is a general feeling that the primary mission of LTI and the VTAE lays in the area of training the posthigh school population. The large number of staff

who placed high priority on strategic statements 5 and 8 (Appendix L) indicate that many staff believe the VTAE system should exist for initial job preparation and for students immediately out of high school. A low knowledge of the strategic plan appears evident. The board had given four of the strategic plan statements high emphasis. The four statements related to the educational services to business and industry. The level or mode of communicating the VTAE mission, the board's strategic plan, and the goals of LTI warrant review.

Conclusions

The following major conclusions were reached as a result of this study:

1. There was considerable difference in the knowledge of economic development and training activities among the administrative staff, VTAE certified management staff, noncertified management staff, instructional staff, and support staff.

2. There was considerable difference in the attitude toward economic development and training activities among administrative staff, VTAE certified management staff, noncertified management staff, instructional staff, and support staff.

3. The lack of knowledge regarding economic development and training activities parallels the recorded negative attitudes toward economic development and training activities.

4. In-service activities increased the knowledge of economic development and training activities of the administrative and VTAE certified management staff as evidenced in posttest results.

5. The noncertified management staff did not increase knowledge of economic development and training activities even though the staff group was inlcuded in in-service activities.

6. There was considerable difference in the knowledge of the LTI board's strategic plan statements and emphasis among the administrative staff, VTAE certified management staff, noncertified management staff, instructional staff, and support staff.

Recommendations

Recommendations for Improved Practice

The following recommendations have been formulated for the results of the study:

1. That the Lakeshore Technical Institute administration staff accept the findings of the study. Results have indicated a need for visible commitment to economic development and training activities requiring additional communication to all staff. The LTI board's strategic plan states the institutional goals and commitment to economic development and training. However, the visibility and administrative commitment to the institutional economic development and training goals must be expanded. This was supported in Milbrath's (1986:9) study. "Lack of clear mission" was an identified obstacle to economic development and training activities. Milbrath's (1986:18) recommendations included, "If economic development is to be a major thrust, it must be defined by the board and communicated to the staff so that agreement can be reached on what it is and what it is not."

Warmbrod (1983:19) stated that the mission, explicitly stated by the top administration, is a key element in economic development and training. The recommendations of the study and the recommendations of Milbrath's (1986:7) study concur.

2. That the results of this study be used to plan comprehensive in-service activities for all LTI staff groups. Comprehensive in-service activities would increase the awareness and the knowledge of the LTI board's strategic plan and its relationship to economic development and training, the administrative commitment to economic development and training, and the role the VTAE system as it relates to the state of Wisconsin's economy and economic develpment goals.

3. That the in-service training activities be sequential in nature rather than a one-time activity.

4. That an evaluation process be developed in order to determine the change in staff attitude and knowledge as in-service training activities are conducted. It is important that the commitment to economic development and training activities be internalized by all staff.

5. That the communication process emphasize the free flow of information between program areas and economic development and training personnel. The planning of economic development and training to the needs of business and industry creates an opportunity for feedback from instructional staff who have been directly involved with economic development and training activities. At the same time, staff who have not been directly involved will receive economic development and

training information through the planning process. This will create an additional opportunity for staff input into economic development and training decisions and activities.

6. That considerable effort be given to the noncertified management and support staff groups. Both staff groups provide the supportive services for economic development and training but have no direct involvement in the delivery of the activity. Each individual LTI staff member must understand how specific job responsibilities relate to the LTI board's strategic plan for economic development and training activities.

7. That further study be considered to identify specific mind sets, roadblocks, and inaccurate information impacting the implementation of economic development and training activities. Further study may be warranted to foster positive attitudes toward economic development and training activities.

8. That a plan of action be prepared to address the resistance to change as it relates to economic development and training. Factors of new target population, leaving traditional posthigh teaching, and job security may be creating resistance and negatively impacting economic development and training.

9. The results of this study be used to encourage the formation of a Business, Industry, and Education Council to provide a partnership for the economic development of the Lakeshore Technical Institute's district. The executive summary of the Wisconsin Department of Development (1984:15) lists as a major policy implication

the Retention and Expansion program. "The Department of Development has begun the process of refocusing its mission to reflect the importance of working with existing Wisconsin businesses to help them succeed and grow." The exchange of needs, staff, and expertise will create an opportunity for joint problem solving and decision making.

Recommendations for Diffusion and Implementation

The results and recommendations made in this study will be presented to the following groups:

1. The adult and continuing education administrators for the sixteen Wisconsin VTAE districts. This group represents the administrative personnel who oversee economic development and training activities in each respective VTAE district. The study could be duplicated in respective districts and the results used to evaluate the knowledge and attitude of individual VTAE staffs.

2. The Lakeshore Technical Institute economic development and training team. This group is responsible for the direct contact with the district's business, industry, government, health, and human services agencies. The interest this group has in the continuation of educational services to the district corporations and the status of the LTI staff is prominent. The quality and quantity of economic development and training activities is vital to the group's work.

3. The economic development and training coordinators in the Wisconsin VTAE system. This group is responsible for the direct contact with the state's employees. Replication of the study in

respective VTAE districts may provide an internal assessment helpful in evaluating the knowledge and attitude base of respective staffs.

4. The Lakeshore Technical Institute Board of Education's Instructional Subcommittee. The members of the board's subcommittee should be informed of the research results. The difference of staff knowledge and attitude has an impact on the economic development and training activities provided for LTI district businesses and industries.

5. The Lakeshore Technical Institute administrative staff. This group is directly responsible for the implementation of the Lakeshore Technical Institute Board of Education's strategic plan. The staff group's knowledge of and attitude toward economic development and training results can be used to increase commitment to economic development and training activities and decrease resistance.

6. The Lakeshore Technical Institute staff. This group meets for in-service activities to begin each new school year. Each staff member is vital to the delivery of educational services to the district's employers and employees. The shared results of the research can assist in the communication of institutional goals as they relate to economic development and training activities.

This study was designed to provide an organizational assessment for use in improving the economic development and training activities at Lakeshore Technical Institute. The results of the study were possible through staff participation and cooperation. It is anticipated that the results will be vital in the planning of expanded

communication and in-service activities. Administration must play a major role in demonstrating the leadership and commitment to economic development and training. It is this orchestration of events that can cause a positive change of knowledge and attitude toward economic development and training. In turn, the quality economic development and training activities delivered to the district's business and industry will "rearm the work force with the tools needed to return the nation [state and LTI district] to economic health" (Carnevale, 1983:5).

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APPENDIX A

EXPERT REVIEW COMMITTEE

the most Important Choice you'll ever make...
Lakeshore Technical Institute
FREDERICK J. NIERODE
District Director

1290 North Avenue Cleveland, WI 53015-9761 PHONE (414) 458-4183 or 684-4408

July 30, 1985

Dear

Thank you for agreeing to serve on the expert review committee. The instrument draft is enclosed. The name and ID number will be assigned to assure ownership of the pretest and posttest.

Please review the instrument for validity; e.g., examine the instrument for accuracy of the information asked for.

Evaluate the instrument's items to determine if the items will result in what I want to measure.

The basic concern is will the individual questions serve the purpose of measuring the attitude and knowledge of economic development as perceived by LTI staff?

Sincerely,

Judy Powers
Economic Developent and Training Coordinator
Human Services

JP:jmb

EQUAL OPPORTUNITY IN EDUCATION AND EMPLOYMENT

EXPERT REVIEW COMMITTEE

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APPENDIX B

VALIDATION REQUEST LETTER

"the most Important Choice you'll ever make..."
Lakeshore Technical Institute
FREDERICK J. NIERODE
District Director

1290 North Avenue Cleveland, WI 53015-9761 PHONE (414) 458-4183 or 684-4408

July 8, 1985

Dear

I am currently working on my doctoral degree. I have received approval for my major research project entitled: Development, Implementation, and Evaluation of Economic Development In-Service Training to Facilitate Culture Change at Lakeshore Technical Institute.

An evaluation instrument will be used as a pretest and a posttest to measure attitude and knowledge of economic development as perceived by LTI staff. In the development of the instrument, I have proposed using a review committee to establish the validity of the instrument's questions. I would appreciate your willingness to serve on the committee. Your expertise in economic development and your current employment make your input very valuable.

Economic development is a major goal of LTI. Commitment to economic development and training activities is evident in limited administrators, coordinators, and supervisors. The study will:

1. Identify the current attitude toward and the knowledge of economic development of the entire LTI staff.

2. Prepare in-service training activities for administration, VTAE certified management, and noncertified management staff.

3. Measure the attitude toward and the knowledge of economic development of the three test groups immediately following in-service training.

4. Measure the attitude toward and the knowledge of economic development of entire LTI staff 30 days after the last in-service training is held.

EQUAL OPPORTUNITY IN EDUCATION AND EMPLOYMENT

Your personal time commitment would include reviewing the instrument and making written comments. The draft instrument will be mailed to you the week of July 15. I would like it returned by July 22. I do not foresee a second review. However, if needed, it would occur the week of July 29.

If you can be of assistance, please return the enclosed postcard.

Sincerely,

Judy Powers
Economic Development and Training Coordinator
Human Services

JP:jmb

Enclosure

APPENDIX C

INSTRUMENT FOR VALIDATION

ATTITUDES AND KNOWLEDGE QUESTIONNAIRE
ECONOMIC DEVELOPMENT AND TRAINING
LAKESHORE TECHNICAL INSTITUTE
1985-86

Name _____ ID Number _____

I have direct contact with economic development activities: Yes No

For the purpose of this project, economic development is defined as the training, upgrading, and retraining of business, industry, and human services employees. It may include: educational courses for new or existing employees, technical assistance, and/or displaced worker activities.

I have been employed at LTI:
_____ Less than one year
_____ One year or over but less than five years
_____ Five years and over

This questionnaire is designed to enable each LTI staff member to describe his/her attitude/knowledge regarding economic development and training. It is important that you answer each question frankly. There are no right or wrong answers.

To assist in gathering the data for this project, please complete the preliminary information at the top of the page. For the purpose of this project, instructional staff is defined as full-time and part-time instructors teaching on a regular basis in a full-time program.

I FEEL THAT ECONOMIC DEVELOPMENT AND TRAINING . . .	Great Disagreement				Great Agreement
1. decisions are made with staff participation.	1	2	3	4	5
2. will provide LTI with a new student population.	1	2	3	4	5
3. is a planned sequence within the district's strategic planning process.	1	2	3	4	5
4. coordinators are the marketing specialists to business, industry, and agencies.	1	2	3	4	5
5. should involve all of LTI's instructional staff.	1	2	3	4	5

I FEEL THAT ECONOMIC DEVELOPMENT AND TRAINING . . .	Great Disagreement				Great Agreement
6. requests from business and industry should be met, at all costs.	1	2	3	4	5
7. teaching differs from traditional posthigh teaching.	1	2	3	4	5
8. teaching should be distributed equitably among instructional staff.	1	2	3	4	5
9. instruction receives adequate consideration on the present work load formula.	1	2	3	4	5
10. should hire and assign specific instructors for teaching only in business-industry situations.	1	2	3	4	5
11. courses taught in full-time programs are readily transferrable to business and industry.	1	2	3	4	5
12. should be delivered to business and industry only by University of Wisconsin-Extension.	1	2	3	4	5
13. should be a top priority item in LTI's strategic planning.	1	2	3	4	5
14. decisions are made taking into consideration the feedback from instructional staff.	1	2	3	4	5
15. parallel's the state of Wisconsin's commitment to economic development.	1	2	3	4	5
I FEEL THAT . . .					
16. midmanagement are highly motivated to become involved with economic development activities.	1	2	3	4	5
17. economic development coordination is more difficult than on-campus coordination/ supervision.	1	2	3	4	5
18. the VTAE system should train for initial employment only.	1	2	3	4	5

I FEEL THAT . . .	Great Disagreement				Great Agreement
19. administration personnel are highly motivated to become involved with economic development activities.	1	2	3	4	5
20. Corporate Connection meetings are vital to the success of LTI's economic development goals.	1	2	3	4	5
21. instructional staff are highly motivated to become involved with economic development activities.	1	2	3	4	5
22. there is a planned and effective communication between economic development personnel and divisional program areas.	1	2	3	4	5

Indicate the priority (high, medium, or low) that you feel the following issues should have at LTI.

_____ Education for employment at entry-level position.

_____ Retraining and upgrading for existing and new jobs.

_____ Related training for apprentices.

_____ Economic development related to customized training and contract services.

_____ Instruction in the basic behavioral skills/understanding required prior to vocational education or entrance into the job market.

_____ Educational programs and services to the disadvantaged and the handicapped.

_____ Courses for the adult student focused on achievement of long-range personal/vocational goals to improve their quality of life.

_____ Collaboration and cooperation with public and private schools.

_____ Coordination with other educational institutions and governmental bodies.

_____ Community services and avocational or self-enrichment activities.

APPENDIX D

RELIABILITY REQUEST

MEMO

TO: Fred Nierode, Pat Lacey, Jim Powers, Rachel Jackson, Jerry Powalisz, Dennis Thiel, Bev Baranczyk, Georgette Johnson, Anna Krowiorz, and Lonna Wagner

FROM: Judy Powers

DATE: July 29, 1985

SUBJECT: Request for Assistance

I am currently working on an economic development project. An evaluation instrument has been drafted. It will be used as a pretest and a posttest. I am asking you to serve as part of the reliability review committee.

Reliability is establishing the accuracy of results. To test reliability, the instrument is given twice after a time lapse; and results are compared. Your personal commitment would be to complete the questionnaire (approximately 15 minutes) on an established day. There are no right or wrong answers. Twenty-four hours later you would respond to the same questionnaire. I would compare your responses.

Please RSVP to extension 228 by Tuesday, July 30, 1985.

jmb

APPENDIX E

RELIABILITY REVIEW COMMITTEE

Administration:	Fred Nierode, District Director Patrick Lacey, Ed.D., Associate Administrator of Adult and Continuing Education
VTAE Certified Midmanagement:	James Powers, Coordinator, Business and Marketing Rachel Jackson, Supervisor, Nursing
Noncertified Midmanagement:	Jerry Powalisz Dennis Thiel
Instructors:	Beverly Baranczyk Georgette Johnson
Support Staff:	Anna Krowiorz Lonna Wagner

APPENDIX F

CRITICAL VALUES OF THE CORRELATION COEFFICIENT

Table A-9. CRITICAL VALUES OF THE CORRELATION COEFFICIENT*

The number of degrees of freedom are given in the left-hand column. An obtained correlation coefficient must be as large as or larger than the value in the body of the table to be significant at the level of significance stated for the column. For example, an obtained r with $N = 2$ would have a df of 18 and must exceed the tabled value of .444 to be judged significant at the .05 level.

CRITICAL VALUES OF THE CORRELATION COEFFICIENT*

df	Level of significance for two-tailed test			
	.10	.05	.02	.01
1	.988	.997	.9995	.9999
2	.900	.950	.980	.990
3	.805	.878	.934	.959
4	.729	.811	.882	.917
5	.669	.754	.833	.874
6	.622	.707	.789	.834
7	.582	.666	.750	.798
8	.549	.632	.716	.765
9	.521	.602	.685	.735
10	.497	.576	.658	.708
11	.476	.553	.634	.684
12	.458	.532	.612	.661
13	.441	.514	.592	.641
14	.426	.497	.574	.623
15	.412	.482	.558	.606
16	.400	.468	.542	.590
17	.389	.456	.528	.575
18	.378	.444	.516	.561
19	.369	.433	.503	.549
20	.360	.423	.492	.537
21	.352	.413	.482	.526
22	.344	.404	.472	.515
23	.337	.396	.462	.505
24	.330	.388	.453	.496
25	.323	.381	.445	.487
26	.317	.374	.437	.479
27	.311	.367	.430	.471
28	.306	.361	.423	.463
29	.301	.355	.416	.456
30	.296	.349	.409	.449
35	.275	.325	.381	.418
40	.257	.304	.358	.393
45	.243	.288	.338	.372
50	.231	.273	.322	.354
60	.211	.250	.295	.325
70	.195	.232	.274	.303
80	.183	.217	.256	.283
90	.173	.205	.242	.267
100	.164	.195	.230	.254

* Abridged from Fisher, R. A., and Yates, F.: *Statistical Tables for Biological, Agricultural, and Medical Research*, Oliver & Boyd, Ltd., Edinburgh, by permission of the authors and publisher. Reproduced with permission from Ferguson, G. A.: *Statistical Analysis in Psychology and Education*. New York: McGraw-Hill, 1959.

Source: Hardyck and Petrinovich, 1969, page 276.

APPENDIX G

FINAL INSTRUMENT

ATTITUDES AND KNOWLEDGE QUESTIONNAIRE
ECONOMIC DEVELOPMENT AND TRAINING
LAKESHORE TECHNICAL INSTITUTE
1985-86

Name _____ ID Number _____

For the purpose of this project, economic development is defined as the training, upgrading, and retraining of business, industry, and human services employees. It may include: educational courses for new or existing employees, technical assistance, displaced worker activities, and/or articulation with local agencies such as chamber of commerce, local economic development boards.

I have been employed at LTI:

_____ Less than one year
_____ One year or over but less than five years
_____ Five years and over

This questionnaire is designed to enable each LTI staff member to describe his/her attitude/knowledge regarding economic development and training. It is important that you answer each question frankly. There are no right or wrong answers. Respond to the statements by circling one of the numbers: (1) great disagreement, (2) disagree, (3) sometimes agree, (4) agree, and (5) great agreement.

To assist in gathering the data for this project, please complete the preliminary information at the top of the page. For the purpose of this project, instructional staff is defined as full-time and part-time instructors teaching on a regular basis in a full-time program (associate degree, vocational diploma, and/or apprenticeship).

I FEEL THAT ECONOMIC DEVELOPMENT AND TRAINING . . .	Great Disagreement				Great Agreement
1. decisions are made with instructional staff participation.	1	2	3	4	5
2. will provide LTI with a new student population.	1	2	3	4	5
3. is a planned sequence within the district's strategic planning process.	1	2	3	4	5
4. coordinators are the marketing specialists to business, industry, health, and human services agencies.	1	2	3	4	5
5. should involve all of LTI's instructional staff.	1	2	3	4	5

I FEEL THAT ECONOMIC DEVELOPMENT AND TRAINING . . .	Great Disagreement				Great Agreement
6. requests from business, industry, health, and human services should be met, at all costs.	1	2	3	4	5
7. teaching differs from traditional posthigh teaching.	1	2	3	4	5
8. teaching should be distributed equally among instructional staff.	1	2	3	4	5
9. instruction receives adequate consideration on the present work load formula.	1	2	3	4	5
10. should hire and assign specific instructors for teaching only in business-industry situations.	1	2	3	4	5
11. courses that meet the needs of business and industry can be the same courses taught in full-time programs.	1	2	3	4	5
12. should be delivered to business and industry only by four-year institutions of higher learning.	1	2	3	4	5
13. should be a top priority item in LTI's strategic planning.	1	2	3	4	5
14. decisions made take into consideration the feedback from instructional staff.	1	2	3	4	5
15. parallels the state of Wisconsin's commitment to economic development.	1	2	3	4	5
I FEEL THAT . . .					
16. LTI's supervisors and coordinators are highly motivated to become involved with economic development and training activities.	1	2	3	4	5
17. economic development coordination is more difficult than on-campus coordination/ supervision.	1	2	3	4	5
18. the VTAE system should train for initial employment only.	1	2	3	4	5

I FEEL THAT . . .	Great Disagreement				Great Agreement
19. LTI's administrative personnel are highly motivated to become involved with economic development and training activities.	1	2	3	4	5
20. I am knowledgeable about economic development activities.	1	2	3	4	5
21. Corporate Connection meetings are vital to the success of LTI's economic development goals.	1	2	3	4	5
22. LTI's instructional staff are highly motivated to become involved with economic development and training activities.	1	2	3	4	5
23. there is planned and effective communication between economic development personnel and divisional program areas.	1	2	3	4	5

Indicate the priority (high, medium, or low) that you feel the following issues should have at LTI by circling H for high, M for medium, and L for low.

H M L Education for employment at entry-level position.

H M L Retraining and upgrading for existing and new jobs.

H M L Related training for apprentices.

H M L Economic development related to customized training and contract services.

H M L Instruction in the basic behavioral skills/understanding required prior to vocational education or entrance into the job market.

H M L Educational programs and services to the disadvantaged and the handicapped.

H M L Courses for the adult student focused on achievement of long-range personal/vocational goals to improve their quality of life.

H M L Collaboration and cooperation with public and private schools.

H M L Coordination with other educational institutions and governmental bodies.

H M L Community services and avocational or self-enrichment activities.

APPENDIX H

MEMO

MEMO

TO: All Staff

FROM: Ed Falck

DATE: August 14, 1985

SUBJECT: Attached Survey

The attached survey, relative to economic development activities, has been approved by LTI and will be used in its planning process.

Please complete and return the survey within 24 hours to Judy Powers. We would appreciate having all staff involved.

We will look forward to your cooperation.

jmb

APPENDIX I

STAFF AND CODING

Administration	Color: White
Falck, Edward	10000 A/B
Grinde, George	20000 A/B
Lacey, Patrick, Ed.D.	30000 A/B
Ladwig, Dennis, Ed.D.	40000 A/B
Malmberg, James, Ed.D.	50000 A/B
Nierode, Frederick	60000 A/B

VTAE Certified Midmanagement	Color: Peach
Alm, Carol	01000 A/B
Hilke, Tom	02000 A/B
Hillmer, Warren	03000 A/B
Jackson, Rachel	04000 A/B
Leehe, Edward	05000 A/B
Ma, Charles	06000 A/B
Mills, Ken, Ed.D.	07000 A/B
Naber, Robert	08000 A/B
Pontar, Antoinette	09000 A/B
Power, Steve	10000 A/B
Powers, James	11000 A/B
Powers, Judy	12000 A/B
Pritchard, Don	13000 A/B
Schrader, Marvin	14000 A/B
Stock, Chris	15000 A/B
Vater, Robert	16000 A/B
Witczak, Tom	17000 A/B

Noncertified Midmanagement	Color: Green
Annis, Peggy	00100 A/B
Braeger, Doris	00200 A/B
Crook, Fred	00300 A/B
Glaeser, Bev	00400 A/B
Holstein, Karen	00500 A/B
Jirikowic, Louis	00600 A/B
Kirchen, Diane	00700 A/B
Klaves, Niles	00800 A/B
Krueger, Ron	00900 A/B
Kuenouyen, Ger	01000 A/B
LaBine, Ginger	01100 A/B
McCabe, Linda	01200 A/B
Powalisz, Gerald	01300 A/B
Raffaelli, Beth	01400 A/B
Risch, Richard	01500 A/B
Romaine, Richard	01600 A/B
Schild, James	01700 A/B
Schulte, Mike	01800 A/B

Skolas, Joan	01900 A/B
Thiel, Dennis	02000 A/B
Voskuil, Dean	02100 A/B

Support Staff — Color: Blue

Bacon, Barbara	00001 A/B
Belisle, Joe	00002 A/B
Bloom, Idabel	00003 A/B
Bogenschultz, Shirley	00004 A/B
Bryant, Paige	00005 A/B
Burkhardt, Jean	00006 A/B
Bushman, Raymond	00007 A/B
Bushman, Rosemary	00008 A/B
Buss, Gary	00009 A/B
Conard, Denise	00010 A/B
Deubler, Ellen	00011 A/B
Dhein, Trudy	00012 A/B
Dickey, Sheila	00013 A/B
Edinger, Randy	00014 A/B
Forbes, Marcia	00015 A/B
Gaedtke, Janette	00016 A/B
Greenwald, Ken	00017 A/B
Kersten, Joan	00018 A/B
Gurtner, Mary	00019 A/B
Gylland, Barbara	00020 A/B
Harrison, Rose	00021 A/B
Hauke, Caddie	00022 A/B
Hinz, Holly	00023 A/B
Holmer, Ingrid	00024 A/B
Huibregtse, Bernice	00025 A/B
Jaeger, Delores	00026 A/B
Jagodinsky, Roger	00027 A/B
Johnson, Norman	00028 A/B
Jorgenson, Judy	00029 A/B
Keil, Jean	00030 A/B
Klatkiewicz, Gail	00031 A/B
Kleckner, Marlys	00032 A/B
Konrad, Michael	00033 A/B
Kornetzke, Thomas	00034 A/B
Krowiorz, Anna	00035 A/B
Leonhard, Corinne	00036 A/B
Lesperance, Kathy	00037 A/B
Lisch, Thomas	00038 A/B
Matheson, Janice	00039 A/B
McColley, Reba	00040 A/B
Miller, Aurora	00041 A/B
Moede, Barb	00042 A/B
Moede, Mary	00043 A/B

Nalow, Betty	00044 A/B
Nespodzany, Robin	00045 A/B
Newman, Karen	00046 A/B
Penrose, Shirley	00047 A/B
Polster, Loanne	00048 A/B
Preiss, Linda	00049 A/B
Rieck, Ellyn	00050 A/B
Riem, Chris	00051 A/B
Roberts, Mona	00052 A/B
Robinson, Rosemarie	00053 A/B
Saunders, Pat	00054 A/B
Schieble, Marjorie	00055 A/B
Schnell, Debra	00056 A/B
Schroeder, Roberta	00057 A/B
Senovich, Lynn	00058 A/B
Shaffer, Carol	00059 A/B
Sharp, Jackie	00060 A/B
Simmelink, Roger	00061 A/B
Stanskas, John	00062 A/B
Sundee, John	00063 A/B
Torrison, Bev	00064 A/B
VanMinsel, Dale	00065 A/B
Wagner, Lonna	00066 A/B
Wassell, Wes	00067 A/B
Monro, Becky	00068 A/B
Williams, Michele	00069 A/B
Wisnicky, Colleen	00070 A/B
Yunger, Arlene	00071 A/B

Instructors	Color: Goldenrod
Anderson, Harold (Counselor)	00010 A/B
Argall, Robert (Trade and Industry)	00020 A/B
Autio, Edward (Business and Marketing)	00030 A/B
Baranczyk, Beverly (Business and Marketing)	00040 A/B
Beck, Raymond (General Education)	00050 A/B
Bohman, Helen (Business and Marketing)	00060 A/B
Burke, Daniel (Agriculture)	00080 A/B
Burris, Roger (Business and Marketing)	00090 A/B
Butler, Robin (Business and Marketing)	00100 A/B
Chermak, Donald (General Education)	00110 A/B
Davison, James (Business and Marketing)	00120 A/B
Dehn, Kenneth (Trade and Industry)	00130 A/B
DeSwarte, Melvin (Trade and Industry)	00140 A/B
Diers, Patricia (Allied Health)	00150 A/B
Dietzman, Puri (General Education)	00160 A/B
Dineen, Gerald (General Education)	00170 A/B
Christensen, Darell (Agriculture)	00180 A/B
Forss, Claudette (Nursing)	00190 A/B

Forss, Henry (Business and Marketing)	00200 A/B
Fox, Daniel (Trade and Industry)	00210 A/B
Frantz, James (Trade and Industry)	00220 A/B
Free, Joan (Special Services)	00230 A/B
Gajdostik, Anthony (Trade and Industry)	00240 A/B
Gall, Peter (Trade and Industry)	00250 A/B
Gauger, Sheri (Business and Marketing)	00260 A/B
Gauthier, Lee Ann (Special Services)	00270 A/B
Gehrig, Paul (Business and Marketing)	00280 A/B
Gibson, Janice (Nursing)	00300 A/B
Grace, Dennis (Trade and Industry)	00310 A/B
Grimes, Michael (General Education)	00320 A/B
Gross, Carol (Home Economics)	00330 A/B
Gutschow, MarJean (Business and Marketing)	00340 A/B
Hall, Jane (Special Services)	00350 A/B
Haller, Larry (Trade and Industry)	00360 A/B
Heeler, Gary (Trade and Industry)	00370 A/B
Henning, David (Allied Health)	00380 A/B
Heronemus, Lois (Allied Health)	00390 A/B
Hickman, David (General Education)	00400 A/B
Hinz, Glen (Allied Health)	00420 A/B
Holub, Linda (Business and Marketing)	00430 A/B
Jaeger, William (Trade and Industry)	00440 A/B
James, Ernest, Ph.D. (Allied Health)	00450 A/B
Jarosch, Sheryl (Nursing)	00460 A/B
Jehn, Heidi (Trade and Industry)	00470 A/B
Jensen, Norma (Special Services)	00480 A/B
Johnson, Georgette (Business and Marketing)	00490 A/B
Jost, Willard (Special Services)	00500 A/B
Kallenberg, Steven (Special Services)	00510 A/B
Karn, Lois (Special Services)	00520 A/B
Kullas, Gloria (Nursing)	00530 A/B
Larson, Bryce (Agriculture)	00540 A/B
Lefky, Linda (Nursing)	00550 A/B
Lerch, Arlan (General Education)	00560 A/B
Long, Audrey (General Education)	00570 A/B
Luteyn, John (Home Economics)	00580 A/B
Mansfield, Ernestine (Nursing)	00590 A/B
Marini, Dianne (Nursing)	00600 A/B
Marsa, Gwen (Special Services)	00610 A/B
Martin, Robert (Business and Marketing)	00620 A/B
Masterson, Michael (Trade and Industry)	00630 A/B
Mathwig, Edward (Counselor)	00640 A/B
Milbrath, Mona (Business and Marketing)	00650 A/B
Mittelstadt, Norbert (Special Services)	00660 A/B
Moore, Robert (Trade and Industry)	00670 A/B
Nagle, Richard (Business and Marketing)	00680 A/B
Nehls, Sheryl (Agriculture)	00690 A/B
Newby, Charlene (Allied Health)	00700 A/B
Olson, William (Trade and Industry)	00710 A/B

Pederson, Thomas (Business and Marketing)	00720 A/B
Pence, Barb (Special Services)	00730 A/B
Price, Jill (Nursing)	00740 A/B
Quicker, James (General Education)	00750 A/B
Redmer, Steven (Business and Marketing)	00760 A/B
Reindl, Charles (Trade and Industry)	00770 A/B
Reiss, Linda (General Education)	00780 A/B
Rhines, Leslie (Trade and Industry)	00790 A/B
Romaine, Virginia (Nursing)	00800 A/B
Sather, Patricia (General Education)	00820 A/B
Schrimpf, Kenneth (Trade and Industry)	00830 A/B
Schultz-Derby, Cheryl (General Education)	00840 A/B
Sharp, John (Business and Marketing)	00850 A/B
Shaw, Connie (Special Services)	00860 A/B
Shihata, Kathy (Agriculture)	00870 A/B
Smith, James (General Education)	00880 A/B
Starr, James (Allied Health)	00890 A/B
Genett, William (Trade and Industry)	00900 A/B
Sullivan, John (Trade and Industry)	00910 A/B
Swenson, Harry (General Education)	00920 A/B
Villeneuve, LeRoy (Business and Marketing)	00930 A/B
Vollendorf, Robert (Counselor)	00940 A/B
Wagner, Fay (Special Services)	00950 A/B
Wallace, Beverly (Counselor)	00960 A/B
Wester, Carol (Nursing)	00970 A/B
Wiegert, Emily (Business and Marketing)	00980 A/B
Wywialowski, Elizabeth (Nursing)	01000 A/B
Zimmerman, George (Trade and Industry)	01010 A/B
Gillis, Paul (Agriculture)	01020 A/B
Hebel, Tom (Trade and Industry)	01030 A/B
Horsman, Danny (Trade and Industry)	01040 A/B
Orsted, Wayne (Trade and Industry)	01060 A/B
Papp, Joseph (Business and Marketing)	01070 A/B
Rulseh, Roger (Trade and Industry)	01080 A/B
Lindsey, Douglas (Agriculture)	01090 A/B
Mann, Beverly (Nursing)	01100 A/B

APPENDIX J

AWARENESS ACTIVITIES AND TIME LINE

Date	Activity	Cost	
March 3	Administration Staff 1. Review pretest data 2. Approve time line 3. Approve activities/expenditures 4. Support activities/expenditures		
March	Daily one liners on closed circuit television and repeated in weekly LTI Announcements		
March to April	Video production preparation 1. Critique Fox Valley's 2. Outline LTI's 3. Write script 4. Plan photos 5. Critique first run 6. Edit 7. Complete		
Arpil 2	Supervisors, administrators, and coordinators presentation, "Manitowoc and Sheboygan Retention Studies," Ray Strobel, Bell Telephone Company	Consultant Travel	-0- -0-
May 22	Supervisors, administrators, and coordinators, Pat LeSage, "Forward Wisconsin"	Consultant Travel	-0- -0-
August 28	Supervisors, administrators, and coordinators (or whole school) presentation, "Economic Development," George Mehallis	Flight Motel Meals Consultant	$440 $ 60 $ 50 $600
Weeks of May 5 and 12	Administer posttest Administrators VTAE certified managers Non-VTAE certified managers Instructors General Education/Home Economics Agriculture Trade and Industry Business and Marketing Allied Health Nursing Support staff	3 sheets x 219 x .06 = $39.42	

MEMO

TO: All SAC Members

FROM: Pat Lacey

DATE: March 21, 1986

SUBJECT: April Management In-Service

The good news--the 7:15 to 10:45 a.m. management in-service scheduled for Wednesday, April 2, has been cancelled. This session will be rescheduled in May. The better news--the reason it was cancelled is the fact that we have the opportunity for Mr. Ray Strobel, state economic development manager for Wisconsin Telephone Company, to present the results of the Business Retention Studies done in Manitowoc and Sheboygan Counties.

We have, therefore, scheduled a meeting of the SAC group from **1 to 4 p.m.** on **Wednesday, April 2, 1986,** in **Room A-209.** Also at this meeting will be a short presentation on the SRI program that is being proposed for the enire LTI staff.

If you are unable to attend this scheduled meeting, please let your supervisor know prior to **Thursday, March 27, 1986.** We will be videotaping this presentation so that you have an opportunity to see Mr. Strobel's informative and exciting presentation.

jmb

APPENDIX K

ONE LINERS FOR CLOSED CIRCUIT TELEVISION AND

REPEATED IN WEEKLY LTI ANNOUNCEMENTS

WEEK OF MARCH 10 THROUGH 14, 1986

1. During 1984-85 LTI school year, 19,961 hours of instruction were delivered to employed individuals through economic development activities.

2. "Forward Wisconsin" is a separate agency designed for the purpose of promoting Wisconsin to out-of-state businesses and industries.

3. Economic development is the training and retraining of the currently employed people for job improvement and/or job retention.

4. "Retraining and Upgrading for existing and New Jobs" has been given primary emphasis in the LTI board's strategic plan.

5. United States business and industry spend over $30 billion annually to train and retrain their employees.

WEEK OF MARCH 17 THROUGH 21, 1986

1. "Economic development related to customized training and contract services" has been given primary emphasis in the LTI board's strategic plan.

2. The Corporate Connection is LTI's communication with chief executive officers of business, industry, health, and human services organizations.

3. Economic development and training coordinators began as BAIL (Business and Industry Liaison) in 1976.

4. The Wisconsin Department of Development (DOD) is an advisory, informational, coordination, and promotional resource to help in the growth and diversity of the state of Wisconsin.

5. LTI's economic development and training coordinators provide a direct link to business, industry, health, and human services organizations.

WEEK OF MARCH 24 THROUGH 30, 1986

1. The primary source of employment in Wisconsin is the more than 80,000, for-profit businesses that provide one job to many thousands--quoting DOD of Wisconsin.

2. "Related training for apprenticeships" has been given primary emphasis in the LTI board's strategic plan.

3. "Forward Wisconsin" organizes out-of-state call trips for the purpose of encouraging businesses to consider Wisconsin for relocating and/or expanding their business.

4. The changing needs of large and small businesses, industries, health services, and human services organizations and individuals in the lakeshore area are the focus of economic development and training activities.

WEEK OF MARCH 31 THROUGH APRIL 4, 1986

1. "Forward Wisconsin" is funded by legislative dollars that are matched by private Wisconsin industry dollars.

2. Quick response by LTI is a key factor in meeting industry's economic development and training needs.

3. LTI's value as an educational resource to business and industry is marketed in Wisconsin's out-of-state promotions.

4. Business and industry's on-site conference rooms have become alternative delivery sites for Lakeshore Technical Institute's educational offerings . . . a result of economic development and training partnerships.

5. The LTI board's strategic plan states, "Emphasis will be given to coordination with other educational institutions and governmental bodies."

WEEK OF APRIL 7 THROUGH 11, 1986

1. Wisconsin's Department of Development has offices in Germany and the Far East. The offices were designed to assist Wisconsin's industry with exports and to promote Wisconsin's foreign plant expansion site.

2. Wisconsin Bell has conducted business and industry retention studies in 32 out of 72 counties in the state of Wisconsin as a part of Wisconsin Bell's economic development plan.

3. LTI's Business and Industry Conference Center was designed to serve business and industry in continuing education efforts.

4. Sixty to 80 percent of jobs for Manitowoc and Sheboygan Counties will come from existing businesses and industries (quoting Ray Strobel, Wisconsin Bell).

5. There are 18 degree-granting colleges in the United States today that were started by business and industry to meet their specific needs.

WEEK OF APRIL 14 THROUGH 18, 1986

1. Economic development is the training and retraining of the currently employed people for job improvement and/or job retention.

2. During the 1984-85 school year, 19,961 hours of instruction were delivered to employed individuals through economic development activities.

3. The changing needs of large and small businesses, industries, health services, and human services organizations and individuals in the lakeshore area are the focus of economic development and training activities.

WEEK OF APRIL 21 THROUGH 25, 1986

1. "Forward Wisconsin" is a separate agency designed for the purpose of promoting Wisconsin to out-of-state businesses and industries.

2. The Wisconsin Department of Development (DOD) is an advisory, informational, coordination, and promotional resource to help in the growth and diversity of the state of Wisconsin.

3. United States business and industry spend over $30 billion annually to train and retrain their employees.

4. Economic development and training coordinators began as BAIL (Business and Industry Liaison) in 1976.

5. The LTI board's strategic plan states, "Emphasis will be given to coordination with other educational institutions and governmental bodies."

WEEK OF MAY 5 THROUGH 9, 1986

1. Forty-six percent of Manitowoc County business and industry responses to the Wisconsin Bell's retention study indicated a preference for training at LTI.

2. Forty-four percent of Sheboygan County business and industry responses to the Wisconsin Bell's retention study indicated a preference for training at LTI.

3. Forward Wisconsin's Board of Directors is comprised of representatives of utility companies, the university system, the vocational technical system, and the banking institutions.

4. "Customized training and technical assistance to business and industry in order to foster economic development and expansion of employment opportunities will continue to increase."--Planning Assumption, LTI's 1985 Board of Directors

5. It is estimated that 8,000,000 individuals are involved annually in corporate training in the United States.

WEEK OF MAY 26 THROUGH 30, 1986

1. The Wisconsin Board of Vocational, Technical and Adult Education's procedures manual states "VTAE districts are encouraged to work to upgrade and encourage the economic growth of their communities."

2. Business and industry describe successful facilitation of in-plant education as "willing to teach to our specific needs when we need it and in a specific period of time."

3. Wisconsin Department of Development has a toll-free number, 1-800-HELP-BUS ['ness].

4. Forward Wisconsin has two overseas offices--Germany and Japan--designed to attract industry to Wisconsin, form partnerships, and market Wisconsin's products.

5. In 1986, LTI Planning Document includes the goal to "expand customized training and technical assistance for business and industry to foster Wisconsin's economic development and employment opportunities."

APPENDIX L

NUMERICAL DATA--STRATEGIC PLAN STATEMENTS

State-ment No.	Administration				VTAE Certified Management				Noncertified Management				Instructional Staff				Support Staff			
	Pre		Post		Pre		Post		Pre		Post		Pre		Post		Pre		Post	
	*3	2 1	3	2 1	*3	2 1	3	2 1	*3	2 1	3	2 1	*3	2 1	3	2 1	*3	2 1	3	2 1
	N=6		N=6		N=17		N=17		N=21		N=19		N=104		N=82		N=71		N=52	
1	(6)		(6)		(15)	2	(16)	1	(16)	4	(12)	6 1	(93)	10 1	(72)	10 1	(45)	22 2	(31)	21
2	(6)		(6)		(15)	2	(17)		(20)		(18)	1	(94)	9 1	(71)	11 1	(62)	8	(45)	6 1
3	(2)	4	(4)	2	(7)	8 2	(7)	7 3	(15)	12 3	(10)	7 2	(52)	38 12	(32)	39 10	(33)	34 3	(27)	24 1
4	(4)	2	(4)	2	(14)	3	(12)	5	(12)	8	(11)	8	(48)	50 6	(34)	41 6	(30)	33 6	(21)	27 2
5	1	(5)	2	(4)	5	(9) 3	6	(11)	9	(9) 2	7	(10) 2	54	(46) 3	42	(34) 7	34	(29) 7	21	(28) 3
6		(5) 1	1	(4) 1	4	(7) 6	2	(11) 4	6	(11) 3	7	(11) 1	40	(50) 13	34	(42) 7	34	(29) 7	19	(31) 2
7		(5) 1	1	(3) 2	4	(11) 2	5	(8) 4	7	(10) 3	5	(9) 5	37	(57) 9	34	(35) 14	36	(29) 5	19	(28) 5
8		(4) 2		(5) 1	5	(12)	8	(8) 1	8	(12)	11	(8)	55	(40) 8	47	(30) 6	37	(26) 7	28	(22) 2
9	1	3 (2)	4	(2)	10	6 1	10	6 (1)	13	6 (1)	15	3 (1)	55	43 (5)	48	26 (8)	37	26 (7)	27	22 (3)
10	0	0 (6)	0	0 (6)	1	8 (8)	7	9 (1)	3	7 (10)	2	9 (8)	26	38 (40)	16	32 (35)	15	41 (14)	12	29 (11)

*Key: 3 - Primary Emphasis
2 - Medium Emphasis
1 - Low Emphasis
( ) - Board Emphasis

BIOGRAPHY

Judy Powers, nee Rodger, was born and raised near Montello, Wisconsin. Her childhood, elementary, and secondary years were spent in an agricultural setting living with farming parents and grandparents. Elementary school was in a one-room country school with one teacher and eight grades.

Secondary schooling years were filled with activities including Future Homemakers of America, Youth Fellowship, the high school newspaper, chorus, solo and ensemble for piano, saxophone and organ, and band were activities during high school days at Westfield High School. Outside of school, Judy was active in church Youth Fellowship, 4-H, teaching Sunday and Bible School, and playing piano for church. Judy was named DAR (Daughters of American Revolution) student her junior year of high school. She received the 4-H Key Award for leadership her senior year. In 1961, she graduated and received a home economics scholarship, an Elks National Foundation "Most Valuable Student" Scholarship, and the Westfield Chamber of Commerce Scholarship.

Judy's postsecondary studies were completed at University of Wisconsin-Stout. A bachelor of science degree in home economics education was granted in August of 1964. In addition to college studies, Judy participated in Stout's choir and the YMCA. She worked as a library aide, a house mother, and secretary to the head of the art department. During the 1964-65 school year, Judy studied on a graduate

level at University of Wisconsin-Stout. She received a master of science degree in guidance and counseling in June of 1965.

Green Bay West High School (Wisconsin) was Judy's first employment. For five years, she worked in senior high counseling, home economics, and English instruction. She also served two years as a negotiator for the teachers' union. In 1968, in addition to employment at the high school, Judy began teaching home economics for Northeast Wisconsin Technical Institute's adult and continuing education division.

In 1972, Judy and her family moved to Howards Grove where she began employment at Lakeshore Technical Institute (LTI) as an evening instructor in home economics. In addition, she served as adult and continuing education coordinator for LTI's Howards Grove Adult Center beginning in January of 1973. In 1975, Judy became an employee of the Howards Grove Public School District as elementary guidance counselor and high school home economics teacher. During the five years with the Howards Grove school system, she also served as head negotiator for the teachers' union, developed the first kindergarten through twelfth grade Guidance Handbook, and was exceptional educational needs coordinator. She received the Distinguished Service Award for her negotiations work from Kettle Moraine UniServe Council in 1978.

In 1978, Judy began full-time employment with Lakeshore Technical Institute as LTI's adult and continuing education coordinator--home economics. During her employment with LTI, Judy has been project director for several federally funded projects and special assignment

projects. Currently, in addition to home economics adult and extension coordination, Judy coordinates the educational economic development and training offerings for the human services agencies, government, and educational employees.

Judy's personal life includes her husband, Jim, and teenage sons, Scott and Jeff, and life on their hobby farm. Judy and Jim own and operate Brookdale Kennels and spend as much leisure time as available with their retriever-trained golden and labrador retrievers. Other activities including camping, gardening, deer hunting, food preparation and preservation, and keeping fit "fill" Judy's life.

Judy's personal goals are to remain healthy in order to complete all the projects, develop new ones, and live a full and active life. Professionally, Judy's goal is to continue in the challenging field of adult education through economic development and training, marketing, and administration of adult education. Personally, Judy's goal is planning a retirement life with Jim that includes training and competing in retriever field trials.

I certify that I have read and am willing to sponsor this Major Applied Research Project submitted by Judy M. Powers. In my opinion it conforms to acceptable standards and is fully adequate in scope and quality as a Major Applied Research Project for the degree of Doctor of Education at Nova University.

_____ (date)

_____
Dr. George M. Barton
MARP Advisor

I certify that I have read this Major Applied Research Project and in my opinion it conforms to acceptable standards for a Major Applied Research Project Proposal for the degree of Doctor of Education at Nova University.

_____ (date)

_____
Dr. Jerry J. Stepien
Local Committee Member

This Major Applied Research Project was submitted to the Central Staff of the Center for Higher Education of Nova University and is acceptable as partial fulfillment of the requirements for the degree of Doctor of Education.

_____ (date)

_____
Dr. Phil DeTurk
Central Staff Committee Member

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